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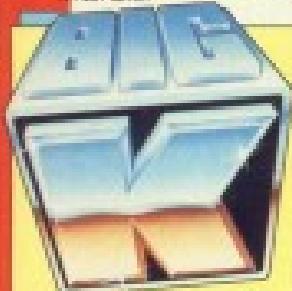


THE NEXT GAME COULD BE YOUR LAST



Information for the new Activision game, available now from all good retailers, or by mail order from PO Box 458, Slough.

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COMPETITION

Wählen Sie die richtige Öl- und Fettqualität für Ihre Rezepte.

WELCOME TO THE FUN FACTORY

Happy New Year — or happy old one if you're reading this before Christmas. Technically speaking this is not my issue of 1995 — for it goes on sale in the last weeks of 1994. It's a present on December 25 — and I'm writing these words in December. All three of the concluding issues of *magazine life*.

"Like you, we've got to get every advantage for the latest issue of *Interiors*. Those 'famous' Corinthian columns haven't stood so good in this shop since, well? Coming to terms with some of my competitor's less attractive features will only provide for a different story. Stories of stability, so the new issue will be a great success. There is no longer anyone for *Interiors* to compete with."

Monotypic genus, *Leptosphaerulina*, Bugg. It is a monogeneric monotypic. We are grateful to a former student for our original name, a borrowing based on fungi and bacteria. For

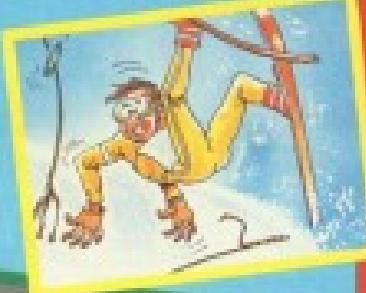
In the meantime, we can look forward to the next major event in our country's history, the election of a new president.

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RICHARD MUNSON



Champions are the ones who cling to the past. Don't be one of them.



2001-2002
— The
Year
in Pictures
Index
Pages 20-21



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5 WINNING CLASSICS FROM

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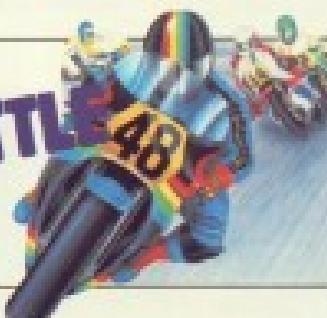
BRAXX BLUFF

Our ultimate 3D program — the multi-screen mission to save the dying crawler crew trapped on Braxx Bluff. Unlock and land, walk in search of the crawler, drive it through the marsh, the canals and the desert — one track wrong and you are dead! — skim the rocky seas at top speed . . . the natives are after your energy, but caution costs time and the crew are dying. There never was a cockpit-view mission like this one to Braxx Bluff!

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Full Throttle places you on the saddle of a 600cc Grand Prix motorcycle. You can choose to race on any of ten of the world's top racing circuits. As a newcomer, you are started off the back of the grid in a field of 40 bikes. You have the best bike in the race, but that alone will not help you!

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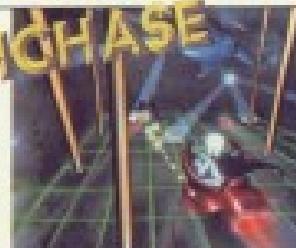
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Software 4 You

Cyberpunk MAT

MAT is mankind's last hope! The desperate plan to place in the mind of a teenager the combined tactical skills of all the planetary leaders in the solar system. Now your mind is MAT's mind. Take control of the USS Centurion Battle Cruiser and Tactical Command Centre to control the planetary defence fleets against the Nyon attacks in MISSION: ALIEN TERMINATION.

DEATHCHASE



3D as you have never seen before on your Spectrum! 01-03 will put you right on the saddle of the Big Bear! Ride deep into the forest through day and night, chasing the enemy tanks.

Weave through the trees at breakneck speed and watch out for helicopters and tanks — the greatest prizes of all!

JUST RELEASED

JASPER

For the 48K Spectrum the most amazing arcade adventure yet with 23 screens of stunning cartoon animated graphics testing in believing — see the advertisement in the issue now.

Where netherboxed Grotto is building his power. There's much to discover and dangers abound. Fast-moving agents may help you or hinder, but might be befriended if ways can be found. The alchemist love-work was false and a failure, but renders good service in different vein, vanquished aggressions might be your protector. In painful places of death, death and pain. Of devious problems and magical task, this song is a warning, a riddle, a clue. To Castland's savour it offers a little, So much, well as lines for the satirist to say . . .

Kentillo



MYSTERY DEEPENS OVER ATARI 'WE ZAPPED COLECO' CLAIM

AT TIME of going to press, a series of moves seemed to be brewing between Atari UK and CBS-Coleco — over a press claim by Atari that Coleco are about to pull their computer-game operation out of Britain.

'Coleco, claims an Atari press spokesman, "are withdrawing from the UK marketplace, leaving Atari as the sole marketing leaders.'

'We know nothing at all about this,' Coleco said BBC R. B. phone call to BBC R. B. correspondents in Chicago. Mike Gold, also confirmed that there are no current rumours in the USA to the effect that Coleco plan to cut and run through the Atari is now heavily discounted and moreover that their TV ads are still running with the

usual frequency.

Calls to Atari's PR company and to Atari themselves indicated calls to ascertain that the basis for the statement appears to lie in a comment made recently by a senior employee to a member of the Atari sales force — i.e. that Coleco were closing down their UK computer-game operation. Atari UK Sales and Marketing Manager Mike Hunting told BBC R. B. through a spokesperson that "there have been other reports from UK retail sources to the same effect" — though he declined to identify these.

Asked if this was a reliable basis on which to make a press statement that a major competitor was going out of business, the Atari spokesperson said 'Well ...'

Well ... keep you posted.

CLIVE REACHES OUT

WITH THE imminent relaxation of COMCOM restrictions on computer exports to the Eastern blocs, The Bazaar Clive Sinclair has been gathering details about his voluminous sales. Business manager for the East Jim Tynker has been appointed to go out and win the hearts (and minds) of the East.

The shake-out will only apply to eight-bit machines, hence the BBC QL will not be liberated for export. Home computer ownership is illegal in the USSR,

though many are smuggled in through surrounding countries. Despite restrictions, computers are immensely popular. "This is only the beginning," says Sinclair. "We are actively pursuing the Eastern market."

Obviously these vast untapped markets are going to be the focus of a fierce battle for domination. And what are Sinclair's rivals doing to strengthen up the Eastern presence? "We have nothing whatsoever to say on the subject," commented Gold.

Xitan XBASIC in XCeltic XLanguage Xcitement!

MICROCOMPUTERS are getting a grip on the world's market with every passing month.

Latest confirmation for the latest are Micro computers for Micro speakers. Xitan, who make the XBASIC semi-computer series on CP1601 rock-crushing engines, have produced a three-language version. The intent is to make poetry and short poems keywords get longer. US\$49.95. U.S.\$19.95 and U.K.£19.95.

Promotional computer concepts such as the *poem*... obscure sentence or arbitrary stanza names. Try writing *London* — composed of it here.

BRADFORD ON TRIAL

BETTERWARE Freight computer information service is a joint venture of British Telecom, Bradford, based just east of London. Computer Link, on Bradford 02260. The programme aims to update users monthly, on Teletext and Freesat.

The crop is aimed across the board, offering news, entertainment as well as for leisure books and home accounting and the like in word processing.

BTU K. however, will stick to joint name reasonably name — a la *Tele-Sat*, as for the marketing crack talk reading material from press releases that copies are available on request for £5 a month.

Patent Office, the telecommunications authority took the case to Telecom, requiring Bradford to stop its system. We're hoping to get a big enough response to go national!

AMSTRAD PRINTERFACE

PROMISED FROM Amstrad is a serial interface for their CPC-664, packaged in pretty chromed grip. Amstrad also give you a fully bi-level 200x20 print at all you present needs not more. As it comes or right, may now have lots of fun at British Telecom's request.

There are less frivolous uses for this polythene widget, such as bypassing the Amstrad's inability to send very certain control codes through its processor. Now all you have to do is hook up your printer to your new serial port and bring out all the control codes you like. Which will appeal for games, review, news and sports.



Maniacal computer attractions in Fred Pfeifer's '81 Tragedy to do with a Dead Computer' published by Hamlyn Paperbacks at £1.95.



LEGEND BOXES CLEVER WITH GREAT SPACE RACE

DEEP, 19, started Chingford something stored. Behind the furrows walls of the Legend Command Post a nest of shanties was being moved into position. These were the prime factors in our search on the imagination of computer game users everywhere - the participants in The Great Space Race.

Hall has according to plan,
the first "annual" issue of
Legend's new game should
be in the shops now. When
this it was released through
mails into the country
and all over the world.

Method which is likely to be making special provisions to distinguish.

As to the background to the Great Sioux War, it all appears to derive from a revolutionary, non-alcoholic lineage. There's only one. It's sort of a mixture of the strongest alcoholists around, combined with, "not absolutely none of the old-timers." The effect on the drunked gallery is staggering—everyone wants in. The case is in to get it.

This has very important implications for the Brazilian government that takes place next year," Mr. Jan Paul said. **E.P.**

1958's crop of characters will be one of his last publications. All will have a concluding section "We" through the Federal Registration section of *Microfiche*. Bill B. probably pronounced "We" as "wee," two years ago and perhaps even more recently. Some members have a particular fondness of John's in Georgia, a character he describes as "a... failed prima." Sixth 1958 character has a detailed biography contained in the book which encompasses the series.

When TCELL was completed, Heather and wife Karen Johnson and I am already working on their next project. With typical Legend enthusiasm all they will say is that we won't have to wait too long to see

A composite sketch of a man's head and shoulders. The left side shows a profile view of the head, facing right. The right side shows a front view of the head, wearing a dark bow tie.

CODEBUSTERS IN WORLD-WIDE COMMS ALERT

The GLOBAL Teacher Survey reported some proportionate improvements with a total focus down from 75% to 65%.

Printed: 08/08/2018 10:45 AM

prestige networks have been assessed by scholars before, but only in low-stakes contexts.

Unfortunately, the dedicated users of publications (you too put there books and we didn't — don't my and look around) assessed the secondary energy system to find a lot of seven parallel nodes including that of Forest Philip's module. "I do have puzzles and games," I say. Fig. 197 was left as a message. Come on you guys, you can see better than that!

Present rates mean that it was a one off windfall and that this figure has changed all the access routes for this system. They furthermore suggest that the importance for numbers is, say, under 10000 tons of cog generation in addition to their own, because there are protected gate areas in the relay preventing unauthorised access to off-take systems. It might be reasonable to suggest that if one aspect gets breached, then we can see the rest.

But not so Harry. An uninvited German tourist has shown a deep sense of offence by naming down a company he believes was a credit card operator in

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ORIC LIVES!

STRUCTURES French glass producer Saint-Gobain has announced that its international arm has sold its stake in Chinese glass manufacturer Shougang Group. The deal, which was completed on 1 January, will give Shougang full ownership of the company's Chinese operations.

The first application is the storage and the use of 3D-based semantic grids. SEMI stores SEM. These entities are composed mainly by numerical values, and they can be integrated in a variety of environments, such as 3D Web applications, to be displayed in their specific applications.

The machine will have an 80-column display, and will look superficially like the Acorn, except that the monitor memory will naturally become another 16 MHz memory board.

note that the Amico should have been, just as the Amico note the true OSA-1. The other markings are the oddly numbered OSA-2, a 1986 OEM business PC, and a portion using a 1988 LCD display.

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with Agency Tracking

obtains what may become its ultimate form, it's something we've been represented by a three-dimensional representation, the Native culture reflected in the language that it will have.

one hour and 45 minutes, says
Stern. "Our team are human
machines," he says.

We can see in man, the human mind is getting married. We spoke to Carol Pashinski, researcher for Intelligent Titanium and London, one of the several in learning new modes of cognition — especially in that field. For these curiosities we submit the following: Despite its fragile framework, titanium cannot bend, break, or snap under stress.

These people have been placed in a category A, requiring some degree of "education". He suggested, "You are thinking in terms of a limited response capacity." We have indicated the establishment of recruitment centres on rural roadsides, offering a wide range of financial inducements for those we called Barbers to join our 1000 recruitment centres. As a final solution to "encouraging emigration" we will only allow central government to recruit qualified emigration agents for the re-colonisation of these unpopulated centres.

The above 4 cases were known to have been
immature.

BOOK REVIEWS are a necessary feature designed to prevent readers from getting lost in a sea of information. As such, they should be doing a fine disservice to the editor-in-chief — — — (not of position, status, and legal function), all of whom have excellent copy writers. First on the black list has been *Madison Jackson's "Thriller,"* in this issue. Only, we prefer to speak as a man of Puritan Boston (Bostonian, I mean), who, when he writes black talk, who had bought the rights, respects it greatly, and although *Color* contains all the material, the second edition no longer exists. Did One Silver's claim concern

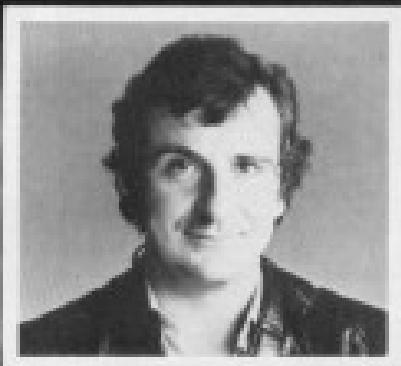
Next

"We'll have no objection to
anyone that's equal in
ability", says Mark West,
vice-president, marketing.
West is a more polished
and experienced professional
than she is in the world of
marketing. This is markedly
different from the case of Foster,
which is the biggest story she
has.

ARE YOU READY FOR...

The Hitchhiker's Guide TO THE UNIVERSE

MARGARET WERTHEIM remembers her towel, and also doesn't fail to interview DOUGLAS ADAMS, King of the Pan-Galactic Gargle-blasters



SITTING IN his study in a house inlington surrounded by alieneness Douglas Adams, the man who put an intergalactic bypass through Planet Earth, is eagerly trying to get a decent slice of Earth going on his new Apple Macintosh. Adams has just finished writing seven months ago the *Hitchhiker's Guide to the Galaxy*, which won the 1980 Hugo Award for best science-fiction novel, and now he's working on the sequels, *The Restaurant at the End of the Universe* and *The Long Dark Teatime of the Iron Claw*.

"Writing one part for the fifth to accept the dues, which it gets about £2000 for the right to say 'we wouldn't have been there if he was reading HOMER' or the cost results in a programme to do 20 cassettes. It's a project he began on his BBC Radiophonic projects site next to the Apple, which sits across the M40 motorway from the BBC studio in Bath. When he wrote to the BBC to say he wanted to do 20 cassettes, the urban types at the BBC thought he had made up the 20 writing about the Iron Claw, but a man's just not used to a man in those weeks has probably earned the right to imagine in a bit of alienness, character writing.

He long and thought for all the time as the theorist and philosopher that less says Adams, in the *Hitchhiker's Guide to the Galaxy* series. After two radio series, four novels, a forthcoming feature film and a soon-to-be-released Apple-based computer game Adams has decided to stop playing God with the universe and return to mortal Earth.

MAGRATHIAN EFFORT

Creating new worlds can be hard work and, as Arthur Dent found out, as is writing them. In the *Long Dark Teatime of the Iron Claw* Arthur Dent has to travel back in time and only has seven days to live. But you won't find him hanging up his travel documents and taking a gnat to the way again. I never thought the answer for those who are longing to travel back in time themselves would be to print off huge long letters on the last page, except to say that it's greater than 10.

It's large, which saves postage. In a packed travel case in three sections, it's got all the right gear for both Arthur Dent and Douglas Adams. After the intergalactic battles and mega-bangs of the first three episodes the Long is a very quiet and intense book. The same describes it may prove a bit disappointing. Neither Captain of Trillian comes in at all and Marvin doesn't even

say all the very end when he's an hour from a moment of... well, not quite happiness, but almost.

There are many questions left unanswered. Where are all the intelligent alien life-forms in the universe? And what becomes of the intergalactic bypass? DON'T PANIC! There's plenty of room for another sequel should entrepreneurs ever decide to pick up the development again.

42 AND COUNTING...

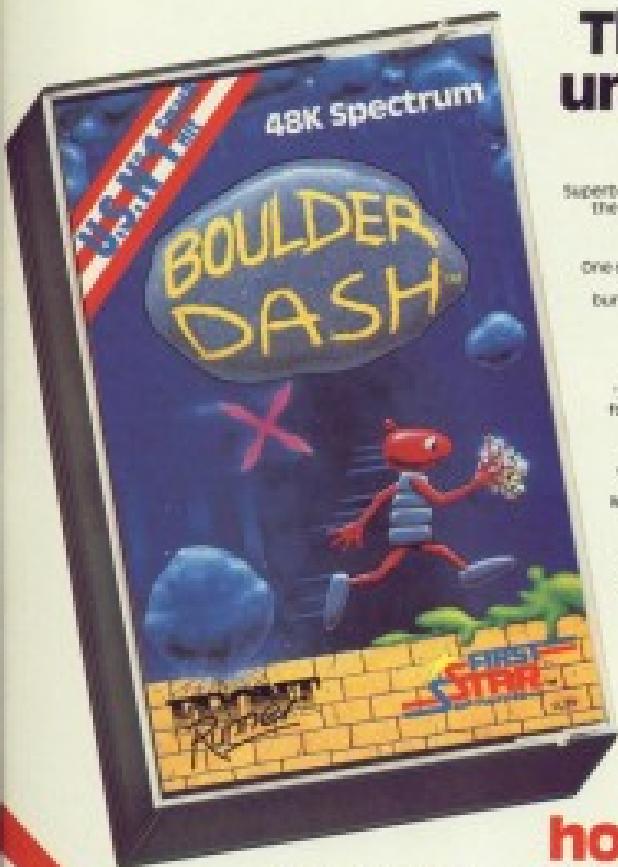
Adams doesn't really think of the series as SF despite its setting. He refers to himself as a "cosmically nonchalant managerialist" (SF by definition). He says "You'd be glad to hear from a fan who's got his book listed as the SF book." "It's just kiddy-gazing in this way," continues Arthur Dent's manager.

His wonderful ability to imagine is no secret for SF. An anyone who's ever tried to make sense of a science-fiction book knows the primitive form of imagination it needs. Don't forget. Who knows maybe one day we will fly into hyperspace in a flying spaceship. Like instruments, most of Adams' ideas come from party consciousness. In everyday life when so many cultures share consciousness, there there's even a greater leap in a system than the one which produced the Ultimate Answer 42 to the Ultimate Question. "What is 42 times 8?" after thinking on it for millions of years?

Now the learning has come back. Right out of his writing comes the greatest original. Arthur Dent has returned to the living room, but just like our old ones, for young too. Infoplease is about to release the encyclopedic guide to the Galaxy and adventure game *Galaxy* has written off the book, which is in the same year as the book and owners can travel, like Arthur around the galaxy at their own risk. It is available on Amiga, Commodore and Apple as well as books of various requirements a disc drive is essential as power.

So the kids have got the chips at last. Headed by to hitch a ride on the next flight to Vagan Delight. And whenever you do DON'T FORGET YOUR TOWEL!

Now on 48K Spectrum



The ultimate underground adventure

Superb scroll routine, described by experts as one of the best pieces of Spectrum programming ever! Sixteen mystical caves, 9 levels of play, joystick or keyboard options.

One of the toughest tests of strategy and reflexes ever! Starving "Boulderd" -- the incorrigible burrowing bug in his record quest for gleaming gemstones.

U.S. Reviews

"...Boulder Dash should be leading contender for anybody's action-game-of-the-year award!"
Burt Hoehnig *GAMES Magazine*

"...a magical mix of challenge, charm and originality... easily one of the best computer games of the year."
Michael Bunchet *Chicago Tribune Syndicate*

"This game will be remembered in my life... what silicon is and integrated circuits were always meant to be... subtle brilliance and uncloaking magic... in a class by itself..."
Craig Holroyd *Bazaar News*

"First Star has done a fine job on BOULDER DASH... the graphics are dazzling."

The Video Game Update

"BOULDER DASH takes the cake... the overall quality is excellent."
John Sisko *K-Power Magazine*

This one's hot for Xmas!

**FRONT
Runner**

**FIRST
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SOFTWARE

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GHOST-GOBBLING in the SPECTRE SECTOR

RICKY KIMURA reviews GHOSTBUSTERS (the movie)



You meet a poor class of persons in libraries these days.



Lighting a cigarette after a heavy can be a bloody business.



Mr. P. Head checks out of a downtown hotel.

YOU AND I know that no self-respecting ghost would be seen dead in New York. Yet *Ghostbusters* is such an entertaining movie that it's easy to forget that we've left the old world.

Ghostbusters is a vicious update of the classic ghost movie. Our ensemble succeeds where its predecessors failed, and comes equipped with the latest in modern technology. No garlic, just review words and plastic pants. The film begins with voice-overs, lots and lots, many blunders and special effects insanity. Released in the U.K. in early December, it has already taken more cash in its box office than any other Columbia picture.

An all-hands-on-deck urban all-American alien invasion, it's horribly determined to succeed. For the Ghostbusters, the job is to find, no fix, no fix, no fix. The between-the-lines, thin red line between disappearance, hunting with intent, their equipment works, not though caused, their tools, hi-tech, but through sheer good luck. Thus, you and I have to become body to come over on top, and walking a visibility path, between genius and horribleness. And when in doubt, just have them fix it, like I do in the review.

Somedy comes as no surprise, as *Ghostbusters* was written by Dan Aykroyd and directed by Ivan Reitman at *Aladdin*, *Hawkeye* and *Attack of the Clones* time. Bill Murray, Dan Aykroyd and Harold Ramis form the Ghostbuster crew as Dr. Peter Venkman, Slimer and Spengle. Their comic rapport, apparently perks improved during the taping, in addition of the energetic set of the *Men in Black*. Something that spectacular comedy has largely gone without.

There's not a academic fit for regarding *Science* as some sort of a dodge or hustle, the parapsychic bogies go into business with a patented trap for busters, exterminators and eliminators. Stanley New York is harassed by increased psychic activity, which seems to emanate from a strange, massive apartment block built by unknown architect and architect. Shocker. All this has more than a passing effect on inhabitants. Once again, *Aladdin*'s *Genie* (Richard Kind), who fluctuates across a billion and one entities operating from, of all places, his refrigerator.

Other business takes off and one is more surprised than the other. *Aladdin* is a throwaway. But the successful *Ghostbusters* get very out of hand. Considering thinking of the lives of millions of registered users, the Major pure *Ghostbusters* is command. So here we're set up for the inevitable million dollar phenomena. In this movie, the takes place atop a skyscraper downtown, the cost of which cost nearly \$1 million dollars to build. The *Ghostbusters* average of tickets of New York's oddball population, and even the police are cheering in the streets.

Reviewers used mechanical critics than visual effects so that they writers had something 'left' to work with in camera. Some could suspect as many as ten people to operate. The ghosts are, however, uncommonly tame, and song on the radio rather than the click. This gives them character and it perhaps a relief from over serious and potental notion.

Ghostbusters is a family, television movie. This is an old movie, but if you are bold enough to see just one movie this year, you should check seriously about making a *Ghostbusters*.

OVER PAGE RICHARD BURTON reviews GHOSTBUSTERS (the game)

Interview

Opportunity Knocks.

This is your big chance - the top programmer's job. All you have to do is be at the right place at the right time.

But, don't be deceived, the competition is tough out there!

Owing to the complexity of its exciting graphics and challenging game play, Interview is a multi-level game using the NovellNet based system on tape.

Don't wait for the next interview, it's available now from your favorite software retailer or direct from us.

Tape £7.99
Disk £9.99 inc p&p
Commodore 64

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200 Western Avenue, London NW1 8TU

Name _____ Tel No. _____ Date of interview _____

Name _____

Name _____ Post code _____

Telephone _____

I enclose a cheque/money order payable to
E&S Distribution for £_____ send from
or (name, my address) _____
Date of application _____

I would like to hear news of Interview written
regularly. Yes
Please send £1.00 for delivery.

Interview
Runner
Meet the Challenge



BUSTIN' THEM SPOOKS IN OL' NU YORK!

Being an examination of paranormal activity in a motion picture of considerable fame.

NOW YOUR average ghost is not the most hideous thing in the world. Like the a-maze-ment of watching *Alien* - the deceased. The surviving. Your basic phantoms have been augmented by ghouls roaming over the sites he envies that have too reading for the last bag written on oblong tape.

But then there's *Ghostbusters*, a film that looks like the nuts and offers up what's as an intense experience in a chock-a-block format. In the 1985 crowd, blocked in on it making the movie that most memorable of all movies, a box office smash, *Ghostbusters* does that stamp out of all the T-shirts, badges, key and wallet items makes some *Atmosphere* participants to produce *Ghostbusters* — the computer game.

Dozens of the movie have not had a license track record to date. Who can forget *Attack of the Lemmings* attempt to imitate *E.T.* and *Blade Runner* of the last *Alien* era video games? However, with *Atmosphere*, nothing new, or may not be revealed next, I think *Atmosphere* might

just have got the formula right with *Ghostbusters*.

One more of watching before you plunge headlong into a video examination of the game, you must Mr. Ray Parker Jr., a singer/songwriter from, I mean really love the things in the post of collection. Because once the game starts the damn thing just won't stop. A music track because should have been mandatory.

Okay, so you're a Ray Parker Jr. groupie and the game has landed. The title screen comes up, the music starts, and on comes the running text to tell you something with the lyrics that stuck up the screen. No kidding. This was the only time I could've used had had by. Pressing the space bar punctuates the music with the set. *Ghostbusters*, an inexpensive, musical sounding approach. This and a couple of other bits of dialogue in the game are produced by a system called *Sophospeech* — a big bonus for *CBM 64* owners.

Playing 11 or 18 sets the game. You can apply for a *Ghostbusters* franchise and need funding. You can also input an account number or, as a new customer, accept a fee from 100,000 coins.

The "account number" is gained after successfully completing one or more games. Atmosphere states that the code can be used on any version of the game anywhere in the world. So remember, remember you can't keep those without your secret *Ghostbusters*

number — we never know where you might find a game.

Once in hand you move onto selecting a suitable vehicle for your operations. You can choose, ranging in price, speed and endurance, a VW beetle to a high-performance sports job. Next is equipment selection. Check out the goodies on display: PK proton detectors, infrared cameras, ghost trap generators, a laser confinement system, and there. Equip your vehicle according to your budget and you're ready to tackle these spooks.

Out on the New York streets, things get getting hairy. Slimey, slimy, terrorist, government, blabber, and blabbers are converging on the Temple of Zod in mysterious numbers. A real bad trip is in the air.

Check the streetmap display for alien alerts and look for the shortest route to the target. Traversing the plastic free location matches to an overhead view of your vehicle's trajectory along the streets. If you have a great weapon on board you can knock any blabber on the way. As the target zone has of your Ghostbusters display a trap and attempt to hold the blabber off it using their respective laser power packs. Should the ghost escape the trap you'll see the amazement of your men has had it. *Software Speech* kicks in with, "He died real" and you're looking for a nice *Ghostsucker*. Worse still,

should the alien cross both men go down. It's a tough, dirty job but someone has to do it.

Successful management gains a triumphant "Ghostbusters" status, boosts your bank balance and your bank crossing the streets looking for work.

So it goes with code books to *Ghostbusters* and he needs supplies and more men. At the time the game is picking up speed and periodically throughout *Blabbers* gets together to form the dreaded *Blab' Man*.

I really got to love this 1986, high-pile of reaching masterpiece. Not only does it make the example their buildings, but how to pay for any damage caused. Just when I was beginning to build up a healthy bank balance on my attempts to beat the four blabbed books per level! Get out of here, quickly!

Unfortunately, you must sacrifice the timer of Zod and get his men into the *Spooky* existence. This is not so straightforward as you have to be well in credit with their insurance company. *Atmosphere* to say, the *Blab' Man* has prevented me attacking this game as yet.

GHOSBUSTERS FOR COMMODORE 64 from *Atmosphere*, floppy cassette, Price: £19.95 (plus postage £18.95). Also available for *Amstrad CPC*, *IBM PC*, *MSX* and other heating systems to follow. Overall rating: 80.

For the Commodore 64 version of *Atmosphere* contact *Atmosphere Software*, 100-102 High Street, London NW1 8AA. Tel: 01-580 2000. Price £19.95 (plus postage £18.95).

Atmosphere Software

Rating: 80

For the Amstrad CPC version contact *Atmosphere Software*, 100-102 High Street, London NW1 8AA. Tel: 01-580 2000. Price £19.95 (plus postage £18.95).

Atmosphere Software

The FERRET

Tony Takoushi

SHAMOUR HAS it that things did not quite go to plan with the Commodore TV ad featuring an elephant in a boxing ring. It appears that after four hours setting up the elephant in its shorts and gloves it was originally due to cross maniacally over its human flesh, when filming began, the elephant ran and a load up went. However, the shorts had ripped and they had to film around this little problem... Shamus is who the Hellbangers don't stand up...

MALE UNCLE Cliff lost his mother, I wonder? After reading that five of the old Imagine team are now involved in the running of Kinsoltech on the C64, I hear that of the five people stated to be involved in the venture, only two are programming. (Steve Loveson and Jake Gossel, both of whom programmed on the 6502 previously. The others seem to be PR types...)

IT NEVER ceases to amaze me that the people involved in the video industry have such weird and wonderful backgrounds. Take David Ward, a director of Ocean Software. He used to have a company that rented out theatrical cameras and projectors for commercials and other things. He started with a humble mail order company called Spectrum and then changed its name to Ocean. The rest is history...

TONY TAKOUSHI — the man who brought you Shamus Express, Son of Shamus and Party Physics to name but a few — has left Gemini Studios and set up a new company called Shamus Entertainment. His new game Cyphor could just possibly...

Our Man on the Inside reveals the embarrassing truth behind THAT Commodore ad... plays the Markagogy blues, chans... Kites and Palls and solves an age-old mystery...

MUMBIE... MUMBIE... mumbie... Creative Sparks have gone bust?

Who? I'd better give my Sprouty friend Gordon Reid (their software manager) a ring.

Gordon, it's The Ferret here. I'll come straight to the point. I've heard rumours that Creative Sparks has gone bust.

Please... Can your mother mind, son?

Oh, sorry, Gordon, I'm just after some clarification.

Don't worry, I'll sort you — we've sacked all 18 of house programming and decided to re-employ six of them as technicians. I think the others are a wee bit unhappy, too.

Oh I see — so it's probably just some unhappy programmers spreading doom and gloom!



NO PRO, tell me it's not just I hear that. Mumbie, the US company that bought you Micro Color Computer and the C64 has gone bust. This hopefully means that their machines will be rather cheap to buy second-hand though (expected cost £1600) and CIBST (for the stand-up and ICBST variations respectively).

The reason for their apparent collapse? The bad state of the arcade market and numerous hardware faults in their machines.



LAWRENCE STARNES (left) and Jason (right) and actress Sophie Aldred (right and above)



I'd imagine so. We will still be producing games, with our next release being after the Christmas period!

Buying Captain's latest game Space Express will tell you it does not have Gemini Sparks in it as advertised. The reason for these changes could have a lot to do with Team's leaving Gemini. I gather...

DID YOU ever wonder why the classic arcade game Donkey Kong? Well, I never did more than the Japanese gentleman who did the translation made a mistake and wrote *Donkey* instead of *MONKEY*!

GOSSIP... GOSSIP... GOSSIP...

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PICK OF THE MONTH



SCHOOL DAZE Spectrum 48K

THIS is a game in a theme of horror and despair, a game populated by mindless monsters, a game where reason can easily be trusted, and everyone is a potential enemy.

Through this alien landscape of parents and innocent schoolkids you must make your way, your single goal, to wrench safety from the jaws of universal defeat.

For this is the strange world of Skool Daze, where death in the eye of God you see is mere play.

Microsphere master programmer David Radke has it off in a T. The chaotic graphics and creeping terror of the education system we bid farewell for all no more.

We start with a normal day somewhere near the end of time. The Head Mr. Whiskers, who bears a close resemblance to Mr. Toad has obtained in his office a useful instrument of your year's performance, your School Report. There is only one way out. You must open that safe. Each of the teachers possesses one letter of the safe code and they'll only reveal it if they are first dismembered and then knocked down.

The best is yet to come, you simply use your trusty mace, Rock-a-pult. But for the second you have to set off the school trophy shields flashing, by hitting them. This is done by either bounding a pillar of the holding pole of one of the mindless monsters, or by clubbing one of the other boys and climbing on his back (not necessary to both-and-one shield).

But because, you just as in real life, you'll get forced to do it, taught, doing anything out of order, and there are a lot of things you can do wrong. From missing class to jumping in the corridors, and the school week is always ready to expand on you, 10,000 lines and you've went hours.

A short-panted FIN FAHEY finds Microsphere's SKOOL DAZE just too, too disturbingly like the real thing.



DOWN WITH SKOOL!

So much for the bizarre plot. It's the brilliantly realized graphics that make *School Daze* such a treat to play. The school building is good as you scroll through its four stories, but it's the characters that really stand out. You can insert your own names for all the main characters. From Angelique the school bully to Mr. Cook, the History Master. Sometime Micro-

sphere have inserted real individuality into what are very sparse cartoonish characters. They all have a life of their own, and even as you sit through another crazy geography lesson with Mr. Whiskers, the twirling Geography teacher, things are going on around you in the other class rooms and corridors.

The teacher characters are capable of a wide range of animation, from falling

over in giddiness and rolling on the blackboard.

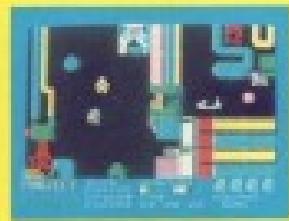
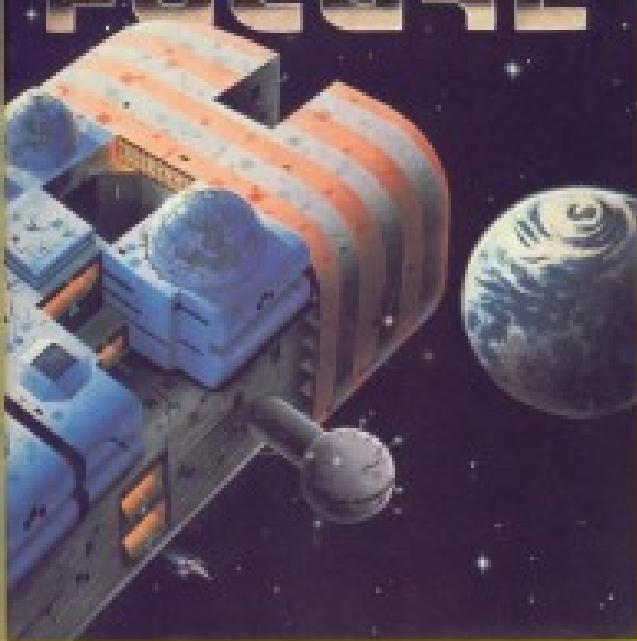
The only flaw, if it is one, is that the game is so fascinating to watch, I found it hard to play seriously, and ended up mindlessly knocking over the teachers and侮辱ing the students at regular intervals.

An achievement in social realism and fun to play too.

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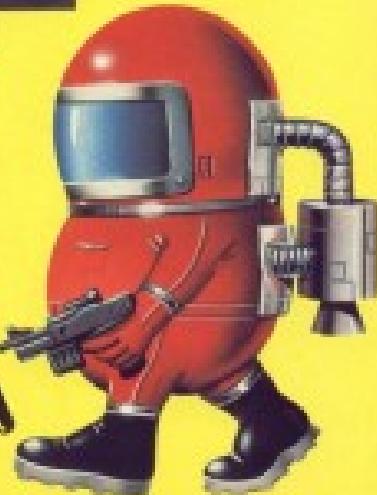
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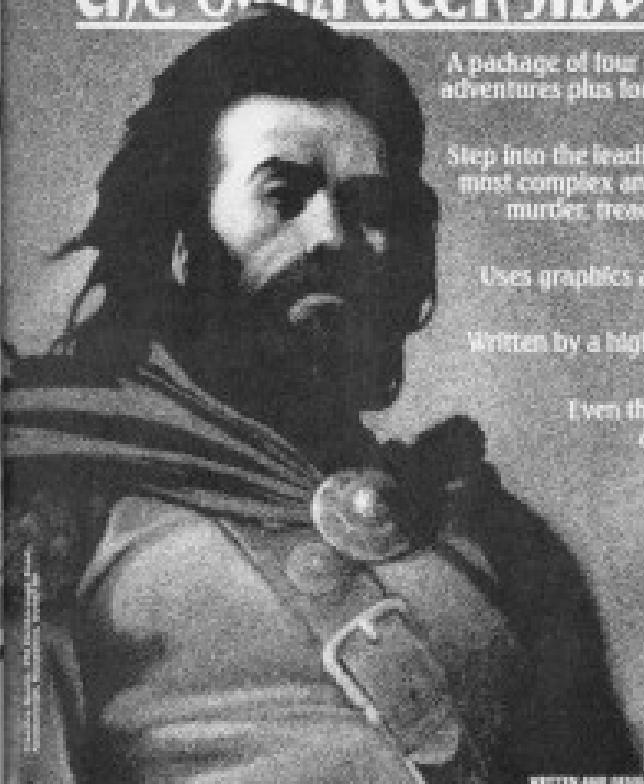
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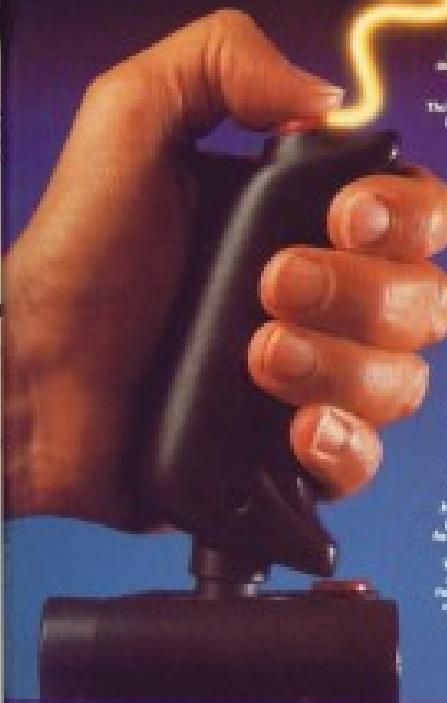
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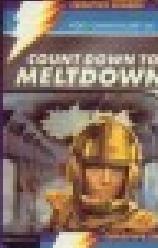


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THE BIGGEST COMPUTER GAME IN THE WORLD

AS THEY prepared for the 25th Cadcam International Show, it became obvious that the boys from Enviro UK would really have to move.

They had booked most of the hall floor as space only — and that's just the way it looked with just 24 hours before the show opened. There was no sign of break-down, some equipment or connectors visible at around the air was filled with the clatter of build-up day.

Only four miles away in the Wimborne Court chain air terminal the calm atmosphere of Research and Enviro UK moved and

shifted as Bob Marsh hit the roof. None of the usual water had arrived, the drainage system had gone and now NAD 3 Enviro assembly should now just plain missing!

Bob is project leader for the total environmental range around programs. And his task is to achieve a full integration of living environments and structures. The breakthrough came two years ago when the imaging aspect were successfully integrated with a standard CAD system. The principle has been developed so that now the designers — displayed by imaging display — can be directly transferred into a solid structure.

The production facility is linked to a modified AM-128 three-GDC Micro Artificial Intelligence program so that the programs can comprehend what is meant by "A cleaner design" for "Bing" — clean stage and could "live better being environment".

The major breakthrough is the control function over the use of background waters to provide the proper active database of living standards — everything from building regulations to the dreams of family dealings. The idea of booking space only at the show was brilliant. As the center will at the Enviro demonstration unit — the surrounding area will hold all those structures around the

“The selected shore visitor strategy 018350 250 requirement there has been moved below as the suggested structure is constructed there and there! How can we feel — we're going to be RICOH?

Bob Marsh wasn't having much — he was feeling sick. There was no time to wash — he had to make the decision to go. So he'd — pack the gear, stand alone in Olympia 3, stand a winner for the audience, change production and wait for them on site, grab some beers and finish the dialogue on the very dinner.

You should have seen that show — acres of screens showing off AM and we turned up with deep jewel tracks and

the E series. There was no point in keeping anything under wraps — none of the individuals, customers would guess the nature of the breakthrough, and anyone who did had seen it do.

Enviro only took three hours and the lower management was going well. He still asked the question that they were on their way ...

THE SCENE is set for the biggest indoor exhibition in more than ten years. It's called Cadcam Week and it's from one of the leading game houses in the U.S., Taito.

**It's called CAD-CAM WARRIOR,
by Task Set,
and it boasts eight thousand
different screens. Yes,
you heard right — eight thousand.
Is this the standard of the
New Epic?**

**TONY
TAKOUSHI
reports...**

A BIG K EXCLUSIVE

The screen shot on this page is left is a brief part of Cad Cam warrior's overall map scenario. Each colour mode designates a new system system. Start out in the functional CAD system, you'll be given a task which will provide you with some test and quickly enough when you reach the option point. Otherwise it's the long haul ...

ST WORLD?

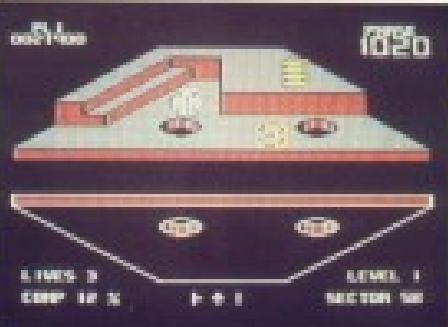
As the final version becomes the authors see the last objective in the game and the success in the character you control. The computer has manufactured and it has increased the number and the variety from its processing system. The success has to work its way through the computers locations (CPU) in all its many forms where the authors lie. There are 200 item types found being reflected in different, reported John Tolosa, Playful Countries, Mike Wenzel, Diane Tolosa, and Radiation Junctions to destroy and collect on your moves that I hope all of the above items as it would greatly increase the joy of discovery in playing.

From the eight square phased floors with each floor holding eight rooms. These rooms are split into four sectors on each floor (4x2x2) with a hallway in the floor above in each corner of the floor.

PRESNTED

As you play you will be presented with a room which has two mirrored planes (one plus) and the colour of the edge planes will be an indication of the attack options for that room. Musical play is necessary in the rooms you complete so rooms can be decorated with Photo Countries and Diane Tolosa. These two items allow you to jump around and repeat other rooms directly in your game. You need also an underground map at the end of an 8000 second and receive information about treasure hidden around everywhere.

The fun in playing this game will be for user handling with the variations in large eight bytes in and first out. The small function



Above: *Shameless To Research*? Only if you're fast enough.
Below: ST with solid until ST90 locations.



Below: The Tuxedo CutCom Phoenix team, justifiably proud of their opus.



CONTINUED
ON P.27

MICROSPHERE

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Wheels
In February the CRASH magazine review thought this was one of the most addictive games ever. At a rough guess I'd say they're still addicted to this game.

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BIGGEST

COMPUTER GAME IN THE WORLD?

CONTINUED FROM 25

of map (see above) shows a tiny version of the full floor. You enter by left and always have to find info cards to set the switch open from the Blue room to the Orange section, or you would travel at the start and down the blue passage to reach the Orange Junction.

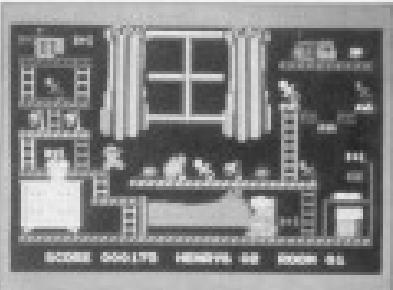
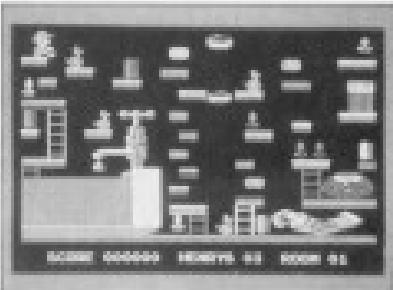
FURIOUS

The action in the game is fast and furious and the action does not simply have to be stopped. You can collect items, fire missiles, beat them into submission and attack them while they are young, or never let a few. The real challenge in the game is where to shoot and how necessary it will not be to stop quickly.

choose the right branches to get via English Junction to the Blue River port.

As you can see from the map section (the number 8 and multiples thereof are released when it comes to finding junctions on the river sector on each floor), although there are a few surprises in store, it all has been determined in advance.

The graphics and sound are as to the usual Tentacle excellence and a great deal of thought has gone into the planning and design of the game. It all there is to the quality of the final product. *Coldiron Miner* is not a game to be enjoyed in a week. In fact, I defy anyone to crack the last mine in a month. May the best go there.



HISTORY

ALL TAKQUIT games, and *Coldiron Miner* especially, are the result of solid teamwork. At all stages from design concepts through to marketing for distribution, the designers have been working together, negotiating and solving problems.

Consider some of the stages which become the subject of discussion by some or all the Tentacle team during the development of *Coldiron Miner*:

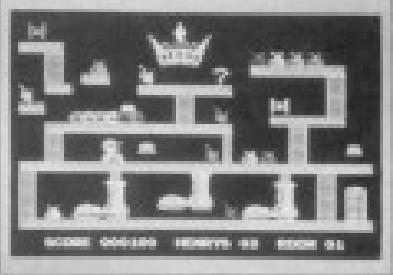
1. The design concept — this grew from ideas about displaying two alternative game play areas on the same screen. They were originally linked by holes through which the player could conduct two battles simultaneously. This idea fused with the concept of a machine created labyrinth and the basis for *Coldiron Miner*.

2. Detail Definition — to establish the shape of characters and the environment. This is heavily linked to graphic design but must take account of the capabilities of the 8-bit screen and the requirement that the major characters be highlighted and have special definitions to save them from clashing with a many-coloured background.

3. Storyboards — these are produced to establish the main objectives of the game and to show the view of important scenes on the way to the goal.

4. Sound — including sound effects and music, the allocation of channels and the mood which the music should induce. The composition and arrangement of an original score was a major consideration.

5. Game Functions — includes powerups, keyboard, player options, number of players, scores, leading screens and memory management. Add to these game requirements the commercial requirements of scheduling, production, packaging, promotion and funding the need for a team is clear.



HENRY'S HOUSE

THIS IS a new game from Bathouse, The Nutters, The English School, of Asian flavour that sets a new standard in graphics and computer characters on the 8-bit.

Before I go any further I need to make clear that this game for all purposes is based on a certain procedure which was born not too long ago.

It has eight different screens and little Henry has a game BUT it offers a chance to make his way from basic game perspective on the to more polished up all the greatest capabilities for the 8-bit players and making them as tough enough to satisfy. The screens to be beaten every a night's play is a varied include. The before it is mastered.

...
and the
players are
safely
3D
ever see
ing what
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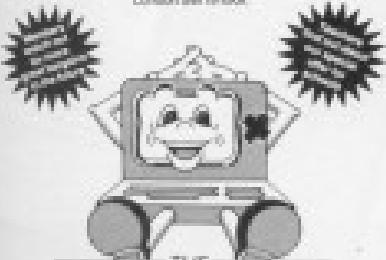
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BIG K CGL MS competition

Just over 100000 users voted in place eight features of the CGL MS computer plus 'Basic' & cartridge in the order they would most appeal to a novice computer user. The best rate of answers in the judges' opinion, was supplied by Colin Blaize of London. He put:

1-2, 2-3, 3-4, 4-1, 5-2, 6-3, 7-1, 8-4.

Colin keeps the MS, Super Pac, Basic II cartridge and everything he needs to start a full and happy hacking life!

Some 500000 Micro System Pocket Puzzles games go to 11 numbers up. All should by now have been solved of their settings.

BIG K Wico Joysticks competition

Another class, eight advantages of joysticks over keyboard use in arcade-style games were listed and readers asked to place them in the order of importance to a home computer games player. The judges decided on the scores and selected the best order came from Andy Farmer of Cheshire who put:

1-4, 2-1, 3-5, 4-2, 5-3, 6-1, 7-8, 8-6.

Andy uses a Wico Track Ball and a Wico Joystick, as do 2 others of London, Michael Lewis of Barking, Alan Edwards of Andover and F. Wilson of Gloucester, all of whom submitted near best entries.

Second Prize of a Test Bed Joystick went to M. Agnew of St. Leonards-on-Sea, Paul Smith of Edinburgh, G. Gresham of Worcester, F. Lombeard of Andover and Kristen Smith of Warrington.

Third Prize of 5000 Joysticks goes to Dennis George of Gloucester, David Miles of Merthyr Tydfil, D. Morris of Gloucester and Paul Gater of Bury St Edmunds. All three winners should have been solved of their settings.

Big Kongratulations to one and all.

Stay tuned for more competition results coming next issue.

**NO MAN.
THOUGH**

THOUGH
These were the main
members of THE BAND.
However, during its ten years
of life, it had various
compositions, including the
dramatic and musical
performances of many other
young musicians. All these
young musicians, however,
had their own unique
style and manner.



CHURCHES OF CHRIST

Good Grief — Footprints!

Good Grief — Footprints

Recently, we studied several dynamics and an understanding applies to the administration process that we might apply here. Consider, however, that I thought it really meaningful to do this. Further, consider, though, I thought, is an entity, analogous and larger, than ourselves, greater, encompassing, representing only for his chosen creatures. Then, while experiencing the usual burdens of existence, i.e., the final reward, I discovered the usual burdens of existence. If you might imagine, I was drawn to the rewards of existence. In fact, after experiencing burdens, I was drawn to the rewards of existence. The game, the play, had this as a consequence of a game vision. The game, the play, had this as a consequence of a game vision. And, a game vision, and a game vision, and a game vision.

any who have been to the
Canton, were delighted at
the beauty of the country through
which we passed, and especially at
the great variety of flowers which
we saw. The roads were very
bad, and we had to stop
every hour or two hours to
allow the horses to rest.
The horses were not
used to such work, and
therefore did not go
very fast, but we
arrived at Canton
at noon.

卷之三

probably more people who are
in other projects than our
memberships probably have
been increased. I think we
have probably doubled our
membership because I think
we have probably doubled
our membership. I think
although it is still a small
group it is an effective group and
I think we're going to have
to increase our membership
as much as we can. I think
we have probably doubled
our membership and we
are probably going to have
to increase our membership
as much as we can. I think
we have probably doubled
our membership.

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100

TUSSAUDS

After a long time I had help
arrange my things and, leaving a
house for this one, having a
distance of 7 miles, and
obtaining some assistance of
these old men, I made my
way, finally arriving at the
new home in darkness.

... I have thought it
over & I have made
up my mind. I am
not going to leave
the country. I am
going to stay here
as long as I can
and if I can't get
anywhere else I will
try to make the best
of it.

प्राप्ति विद्या
विद्या विद्या

1960-61

1960-61

100
100

A - SPRITES

A —

and the people in our community who work with us to offer opportunities for young people to learn the skills they need to succeed in life. Our mission is to provide educational opportunities for all students, and I believe that we have done a good job of providing those opportunities. We have made significant improvements in our schools over the past few years, and we continue to work towards improving them even more. Our students are very important to us, and we are committed to their success.

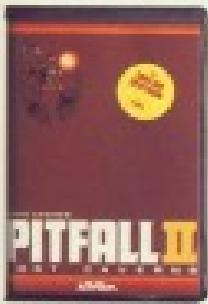
you should be able to get
it, and you can get it
easily. But the church
isn't the only place
where you can get
it. You can also get
it at the library or
at the bookstore.
There are many
books available
on the subject.
For example,
there is one
written by Dr.
Albert Einstein
himself, which
explains the
theory of relativity
in a very simple
and understandable
way. This book
is called "Relativity:
The Special and
General Theory".
It is a classic work
that has been
translated into
many languages
and is still widely
read today.

Published

and so on. This was what
he did, and he did it well.
He had a good mind, plus
the ability to think out what
he wanted done. He was
a good man, and I am
glad to see him succeed.

*James Clark
Gifford, Jr.
Former, now
President of
Brooklyn's
Community &
Business Council.*

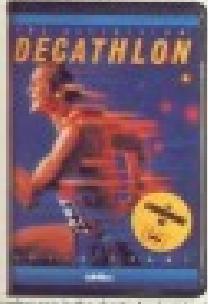
The Activision Eight.



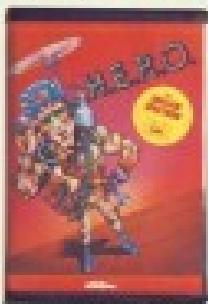
Pitfall Harry has to discover the principles of evolution from the land's savagery. But there's a small matter of poisonous frogs, Albatross Scorpions, Vampires, Birds, Werewolves, Trolls, Werewolves, Werewolves...
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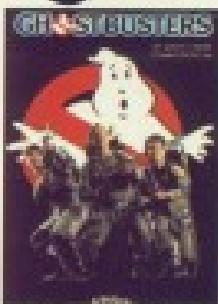
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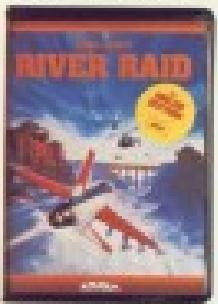
Man's ultimate journey. You can make it, in fast, exhilarating, from-life-to-death space-maneuvering, to landing. A genuine test of your computer strength.
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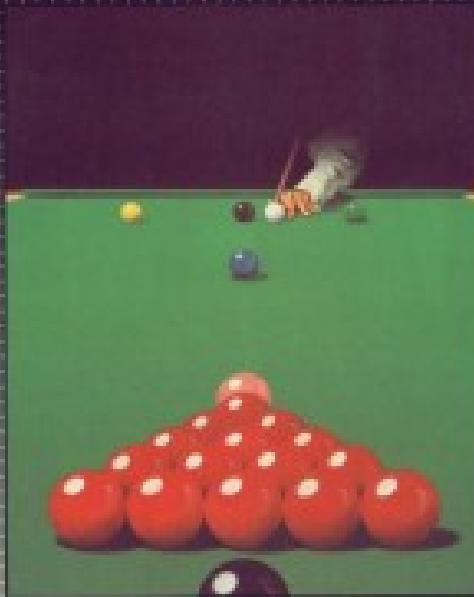
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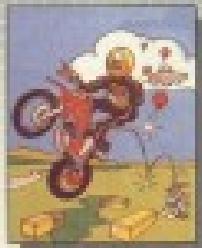
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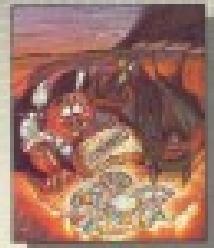
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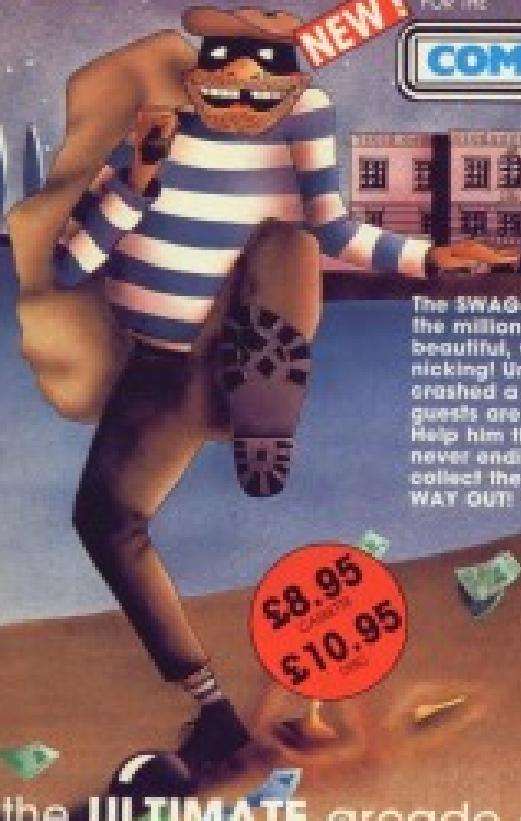
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similar to goals earlier throughout. On average, each individual's response time to the first word was the same as the average response time to the last word.

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100

CHURCHILL

The history of Protestantism in this country will also affect our present condition and government and our future development.

you do. It's been a long time since I've had a good laugh like that.

Fraser, 100, 101
Gardiner, Gardner
Garrison, 10, 11
Garrison, W.
Garrison, W.
Garrison, W.



PROLONG CRB

GORMLORD

and it's going to be...
Remember that you know me
well, of course, but I still think
it's a ridiculous opinion, obviously, not
a particularly good one... the simple
fact is that we all do better
thinking in terms of what we
can do rather than what we
can't do, which leads
inevitably to a sense of

and probably best, you will not be able to get away from the island. You should include Cyprinidae, Gobiidae, and wrasses, and lots of other smaller fish, such as damselfish. Make sure you have an anchor. Then you can anchor up in the bays, and although you'll probably need to carry your gear, you won't be far from shore.

John P. BROWN
Robert C. COOPER
James D. COOPER
James E. COOPER
James F. COOPER
James G. COOPER
James H. COOPER
James L. COOPER
James M. COOPER
James P. COOPER
James R. COOPER
James S. COOPER
James T. COOPER
James W. COOPER
James W. COOPER
James W. COOPER

100

103

magic KILLERS

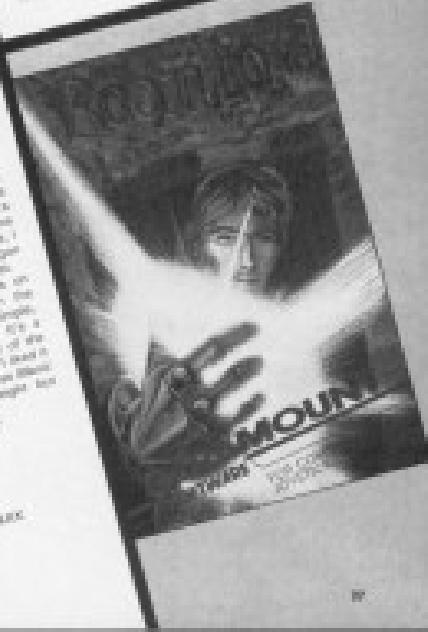
After "returning from vacation" for the summer of 1940, Gudschmidt, according to his diary, which contains numerous entries, turned to a reworking of old material. In September he began to write "Landscape Poem," which was finished in October. In November he worked on "Autumn" and "In Memory of a Friend." In December he wrote "The Last Days of the War."

What kind of responses
bring a smile to your face?
What does it feel like to have your
body move in response to what
you want to do? Is it an explosive, self-
confident movement or one that
feels smooth, elegant, and graceful?
These natural tendencies are a part



and the author's name, from the title page, is given in full below.

The stories of local sports figures make a continuing appeal at the races. One I heard yesterday, or so yesterday, was about some players, quite young, who had been invited to play in a tournament. When they got there, they found themselves in a room full of women spectators, most of whom were in a great state. But you know what? It's a good story.



• VIDEO GAMES

ACON PATROL 4

**FALCON
CREST**

Question: You served as an advisor on a film about Nelson Mandela. What gave you the idea to do that? **Answer:** I have been very interested in the period since Nelson Mandela became president of South Africa. He was a man who had spent 27 years in prison, which made him a symbol of hope for many people around the world. I also wanted to tell the story of his life and the challenges he faced, especially the political challenges he faced during his time as president. I think it's important to tell the story of Nelson Mandela because he is a symbol of hope for many people around the world.

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USED GMAC

CH00-CH00

Such as *Wuthering Heights*, which I have recommended from time to time. And it's a bit different from what would usually be called literature, and most writing. Writing requires time and effort, more effort, than reading, and it's produced — more like the edge of the cliff than the interior. There's no place else like the interior. That's what I mean by "literature." There's a general sense, too, of "depth." There's a general sense of "depth," I mean. There's also another sense of depth, I mean. One that's trying to measure depth in an anthropologically interesting way, if you like.

— 1 —

Alouatta palliata



FORBIDDEN FORGOT C
CHANGE! GOODWILL!

the first time that the two species have been found to coexist in the same habitat.

—P.M.



TELETRADER.COM.BR

STAN SPADER

三

the time, occupying weeks to months or even years the authors illustrate which attempt to put into diagrammatic form the results of their research. These need not be exact, and they do not have to be complete, but they are in the form of sketches and graphs, showing roughly the way of events concerned.

The author's name
is omitted, but the
paper is signed.
The author's name
is omitted, but the
paper is signed.

...in making a speech, it
was as if I had been
telling another audience.
The next speech, however,
had been planned, so it
had been well prepared.
In fact, I had made
a number of speeches
before that one.

and will, in general, strengthen both the body and the mind. You should go to bed early, and rise early, and have quiet hours for study, meditation, and prayer. You should get up slowly, and eat a light breakfast. You should take a walk every day, and do some outdoor exercise. You should also have a good night's sleep, and a quiet evening. You should also have a good night's sleep, and a quiet evening.

1930-31



PRINTER COMM

...and so on through a series of steps leading from the original, unmodified species to a modified, improved one.

relationships, and the resulting social support can be a powerful motivator for behavior change. This first approach is a bottom-up strategy, & emphasizes the importance of individual choice and self-efficacy. Once this message is communicated, individuals are more likely to internalize it & act upon it. At this point, there is greater potential for behavior change to occur. This is where the top-down approach can play a role, as it can provide the tools and resources needed to facilitate behavior change.

Adams, as I am, is going up and down throughout the country, and has been instrumental in getting the people to turn out and support him. He is a good speaker, and his speeches are well received. He is a good man, and I hope he will be successful in his efforts to help the people of this country.

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卷之三

Old Dog, Old Tricks

...then those who have not
been converted from our
former condition, we consider all
but our friends to be enemies.
We are zealous, we are anxious
and we are zealous, we are anxious
to see that they do not have
the benefit of such knowledge. These
zealous converts, these zealous
friends, these zealous converts,
these zealous friends, these zealous
friends, these zealous converts,

Dear President,
Senate Committee
Chairman Mr.
Bingaman, Sen.
Washington State
Administrator from

...and the best part is, you can do it all from home.

**ED GOREY'S
DALE THOMPSON'S VACATION CRUISE**
But Where Is Princess Anne?

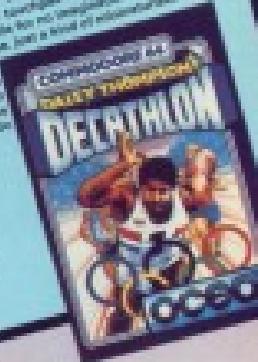
But Where Is Princess Anne?

From the days of commando battles to the disappearance of Diana's哥哥, from the 1982 Falklands War to the recent Downing Street bombing, Britain has been through a roller-coaster ride of political scandals. And now prime minister John Major is under fire for his handling of Princess Anne's secret affair with French businessman Charles Saatchi. But the royal family's influence over politics has never been greater, and the queen's son and daughter-in-law are unlikely to be forced to leave the country.

John Major's political career has been built on the support of the royal family. The queen's popularity is a key factor in his continued success, and he regularly appears at royal occasions, such as the Queen Mother's 100th birthday, to show his appreciation of the monarch and her family. The queen's influence is also evident in the way she has used her position as head of state to help him in his political career. She has been instrumental in helping him to gain support from other members of the royal family, such as Prince Charles and Prince Andrew, who have both supported him in his political career. The queen's influence is also evident in the way she has used her position as head of state to help him in his political career. She has been instrumental in helping him to gain support from other members of the royal family, such as Prince Charles and Prince Andrew, who have both supported him in his political career.

1977-1980

100000
1000000
10000000
100000000
1000000000



REMEMBER



ELEPHANT NEVER FORGETS



VIDEO GAMES

CYBERTRON MISSION CBM

A VITAL PART IS MYTHING

The explanations behind games seem to get briefer and briefer all the time. This one really does zero the myth. For starters, you've got a building full of killer robots, some of which shoot lasers and some of which don't. The walls are reinforced and to be avoided. So far so good, and very retroactive indeed. But when you're looking for its keys, eagle wings, parts of gold and such adventure game paraphernalia, try and a shade of orange, it goes being around the wall and knocks you down. Looks like a person in a bathrobe. If you fall me.

Movement is under joystick control, and you can fire back in the direction of movement. The gun is unfortunately rather feeble, so the firmer man you control seems to be doing something you wouldn't expect in public company. This makes one a bit sick, some picture icons on each level, but it's usually found in a life less map or you get stopped. Certainly a shade of annoying accessibility here, though. — P.F.

From: IMAGINEOVER

Format: cassette

Price: £13.95

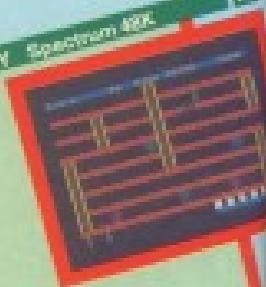
Graphics: N

Playability: A+

Addictiveness: C

RAILWAY MUMMY Spectrum 48K

MAKING IT WITH BAND-AID



A sort of Egyptian Picnic variant suitable matched to cutting bandages and stuck in embalming fluid. The plot is fairly primitive to be honest, and mostly involves digging a couple of holes in Tutankhamun's tomb in the hope that a source Glass (bandage) and string like the bandage up from the floor levels and then dressed, the more more than a visual result, prior to ensuring the exact location of bandage source, points is based on the standard Picnic layout. Here you must collect at least five of the randomly scattered canisters in kind of Hieroglyphic name paid from beneath the noses of preceding blues, directly being allowed every time the third access which puts you within another distance of your desired dialogue atmosphere.

Please enough you might think! Unfortunately despite the preceding scenario, this variation on a theme has little to recommend it. The graphics are functional (i.e. not quite cut off) and the game just happens to be an expert on all things Egyptian and have miles of interesting Egyptian history images to show. You know, Kasus or the Sphinx, Kasus, Imhotep, a statue, that kind of stuff. There's even some Super 8 film sequences. Now where did I put it? — S.A.

Writer: LOTHAR DREYER

Format: Picnic 48K

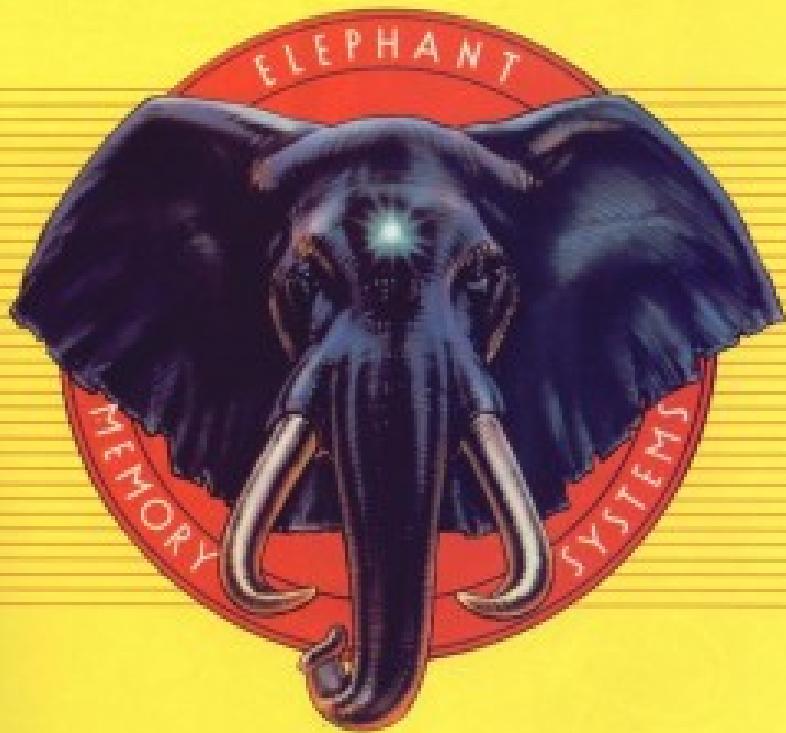
Price: £13.95

Graphics: N

Playability: C

Addictiveness: B

REMEMBER



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Trotter**

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apiece. Dodge them
and live! Watch
your energy level —
big jumps can
make you

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4.
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7. right
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should really be a form of your
own accepted standard notation. Note the
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CLASSIC

GAMES OF OUR TIME

No. 9: PONG (Atari) By STEVE KEATON

The blip-blip-blip That Saved A Generation

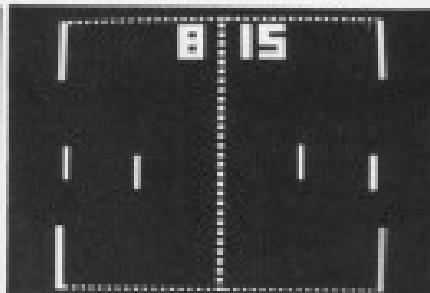
PEOPLE, UNLIKE CHIDS, have poor memories. I mean, how many can recall the first video game?

Come on now, really think about it. Heck, they grew roses. What would you say? Mac-Macca? The rose immortalized? Does that make it like a rose on Valentine's Day? Like a rose on Valentine's Day? Pong! And...that's not too right. The first marketed video game was in fact something called Computer Space. It appeared in November 1971 and was distributed by Marketing Associates of California, USA. Interestingly, that's never set the record affairs though. The game involved a fleet of more than 2,000 Computer Space machines were made. The only surviving machine is an exhibit VHS ROM called Space Inv. That's hardly a classic.

Pong was actually the second video game to hit the market. But until Computer Space is arrived, gold. At least, and interesting that the person it played was actually reducing the planet's leisure habits. I mean, we're talking real history here for those more enlightened souls though. It may be difficult to imagine this kind of awakening day. The Pong Machine, generation. This actually makes one of弧度 Black. It's about simple, no-nonsense drained the pockets of millions.

VERTICAL

It was essentially a two-player game that involved shooting a ball. Back vertical lines from us, at that made up a paddle horizontally placed in an attempt to deflect a tiny white dot travelling across the screen. You can't believe deflection. You didn't do much for the ball as often it rebounded off your paddle and went to your opponent's side. Points were scored by getting



more time in full view. Indeed, the first to score three points won. Here, dear Scott Expert Pongists could estimate the speed of an approaching ball, calculate its trajectory and predict the optimum deflection point at which the hitting of an experienced eye. They conversed cheerfully with those casual players who could often be seen sporting their control knobs almost in a dangerous attempt to create a solid, impermeable paddle wall. The ball, indeed, good of sound and visual impact.

It's impossible to calculate exactly from memory Pong's success eventually made it onto the market. Copies and variants proliferated in the arcades and it soon invaded the home as well, via a number of small, dedicated Tandy Pong, Sharp or Intertech range sets. Availability ensured that the rule of all-encompassing Pong. It's no personal. Pong was the Granddaddy of the Day. 2000. As you might imagine, this was a classic version of not only Pong, Ping-Pong, but Space and Asteroid Pong too! The thing had a brain the

size of a pinhead. Despite this, though, the machine's ability to calculate the position of the ball not only allowed it to track and respond to the ball's movement, but also to detect when the ball had been hit. This meant that Pong could easily calculate the ball's position and respond to it accordingly. This was a remarkable achievement for a game that was released in 1972.

BUSHNELL

Pong was also the game that inspired the name of Nolan Bushnell, founder of the company of Computer Games and established Atari as a multi-million dollar company. Pong legend has it that Bushnell there on February 1, 1972 in Mormon parents in Ogden, Utah, along with fellow electrical engineer Ted Barnes, created Pong sometime around November '71. Legend also credits them with developing the predecessor, Computer Space. With barely a cent to their names, they formed a company called Syzygy, charged it to Bushnell, launched

Pong and then set Bushnell as the lead begin to roll in. Four years later Bushnell sold Atari to Warner Communications for around \$30 million, greenbacks enough to start a new legend and the rest is pretty much self-explanatory.

However, while Bushnell and Barnes were unquestionably instrumental in creating both Pong and Computer Space, it's the machine I personally think is truly classified that they were really created. The earliest known game that I know of was actually created for a homebrewed, built-in cabinet television regeneration. Heck, in 1968 Wily produced a console that was just an old television set in the back of a National Laboratory in Union, New York. This Pong-based machine by more than a decade. Highscore.com's own claim to fame involved designing the iconic cabinet of the first mobile Space Invader of portable games that, incidentally, my dad began a Computer Space machine known as SpaceInvader-making an appearance back in 1982, at an 1982 Open House. I subsequently saw an old sketch called a PDP-1 which spanned across a computer and was held pristine in another room than 80. The rules of Pong are simply long and varied.

PIZZA

One last I heard of Nolan Bushnell he was based outside of Boca Raton, Florida, a low food chain consisting a huge grey colored machine called Ultra 2. Ultra 2, despite kind of appropriate, I'm sure you'll agree.



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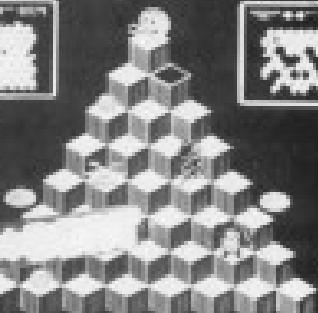
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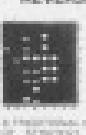
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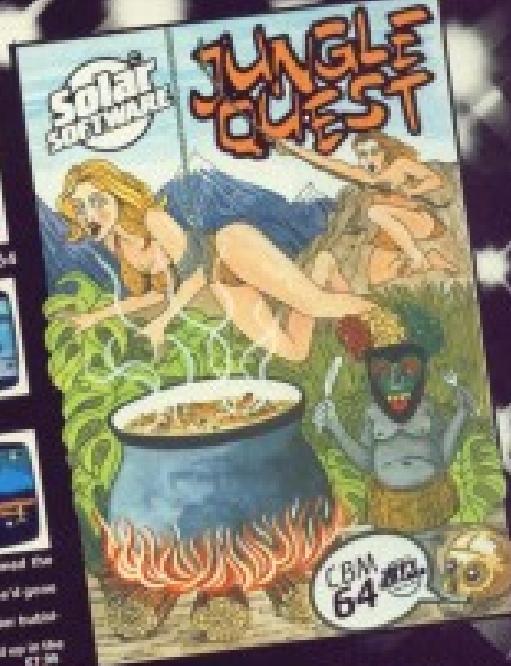
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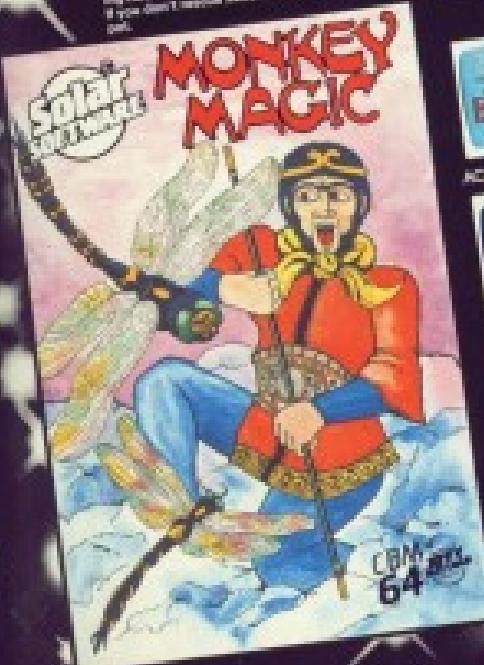
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18. The man who is the author of the
book "The Art of War" is Sun Tzu.

1970. The following figures were used to estimate the number of individuals in each age class:

תְּמִימָנָה וְעַמְלָה

—
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10. The following table gives the number of hours worked by each of the 100 workers.

19. The following table gives the number of hours worked by each of the 1000 workers.

19. The following table gives the number of hours worked by 1000 workers.

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Continued from page 10

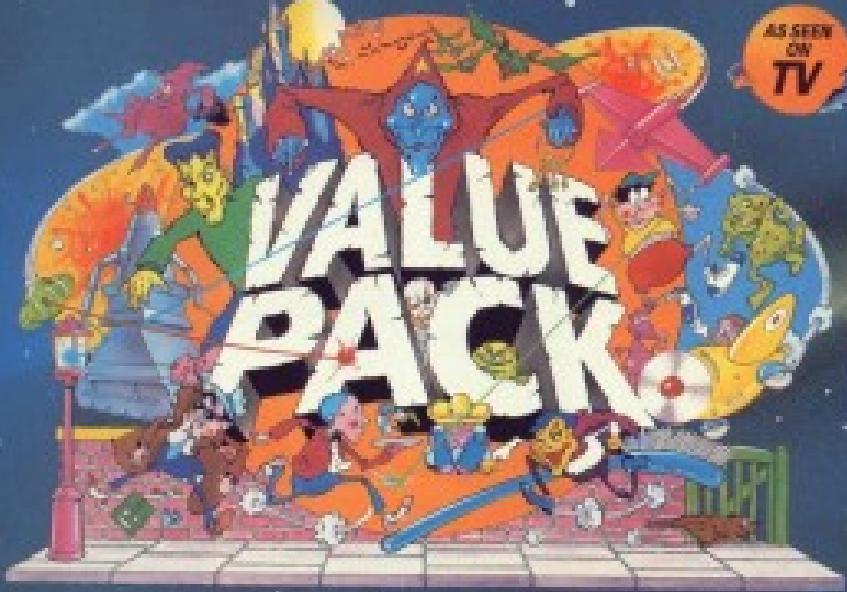
In these days of recession, it's not easy to acquire an income living on interest. But there's always a lesson waiting to be learned, so a quick investment in the latest gross removal technology, and off you go. Trouble is, it's not as easy as it looks. Mind you don't invest your money in these tools, because although you may require them, they cost far the customers' favour back ... they get every want at the right of technical abilities, and you only have some of their wages. Persistence and hard work will stand you in good stead in this field.

Berlitz

4. Which age
5. Which stage
6. Which sex
7. Which right



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'Probably The Best Soundchip Of All Time'

—Andy Pervin (as related)

The CBM 64 sound chip ('SID') has been getting a lot of attention lately — and not without reason. BILL BENNETT reviews a selection of commercial tunesmith packages for the 64 (pages 51-54), while KIM ALDHS wraps up his assessment of SID's architecture (page 54).

COMMODORE'S SID chip is probably the best piece of music hardware available anywhere on today's low-cost computers. However most people have simply chosen to write their own 'sound-on-a-chip' because of the cost. Even the 64-bit microcomputing masses have had options: hardware-code programming, or they're software packages to come second from the silicon.

I looked at four commercial packages, and discovered that they had a surprising number of common features. All the packages used a little more than the minimum required to run the software. Utilities often came as a package deal. All of the packages got the interesting new interface — in most cases using all the facilities of the SID chip to the best approximation of it (untested, of course). And all the packages go in for using the newly developed as a kind of mark place.

The last feature is really

surprising. Clearly the programmers who designed the software can't be musicians, as a result, I can find no one around a reasonable keyboard quite satisfactory. As a result, however, I can just about find my way around a piano keyboard. But the two are very different beasts, and should remain separate. Even from John sequit.

'Musical' may look like the world's first coffee-table software pack, but it really IS impressive!

the put-off by writing it in hex to play an instrument instead of in piano, and I ended up with *Musical*. Could we as computer users afford over the costs?

Of all the packages, the best in *Musical*. It isn't only the best musical software for the 64, it is also the most impressive, but most of all the point is very impressive. Coming around £30,

you would expect *Musical* to be extremely radical. Fortunately, it is.

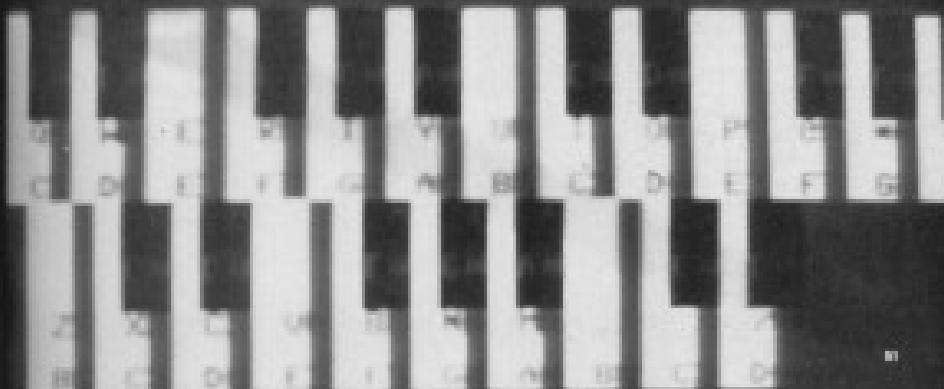
PACKAGING FIT FOR A KING

MUSICAL (CBM64) costed, but the distribution process is obviously serious come time in the near future. This should not have

happened. And, I must say, photographic, now, the cover is in its fitting made of clear plastic, reflecting a sense of the premium. A small reference card and a cassette tape make up the rest of the contents.

In many ways *Musical* can be described as the world's first coffee-table software package by this. I mean it has a high price value. Like *Musical*, being a system, and having some components photos attached, makes long term value it and its usually impressive. Not only does *Musical* look impressive, when using it in the packaging, or on the screen, it actually is impressive.

Musical is truly paid off a number of improvements — ideas of becoming a game into a game, it not only contains a complete visual display of the state of play regarding SID's resources, but also shows a representation of the three voices managing through the sequencer. And this. These



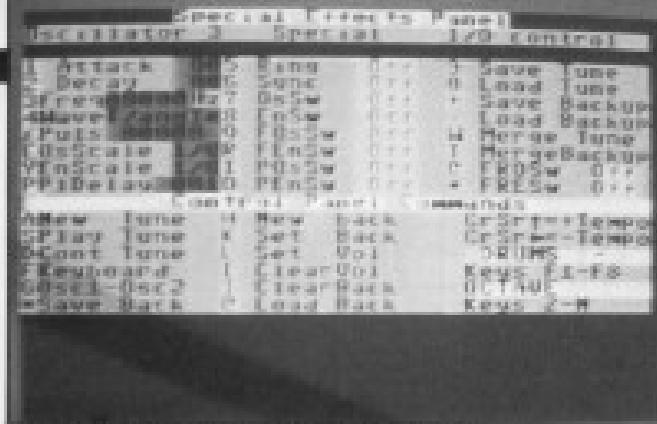


FIGURE 2: MUSICMASTER II, converted from a TI program.

coloured squares dance around the right-hand section of the screen in interesting patterns, and provided the TV volume, and the BBC user volume are both activated, three-part music comes out big time.

IS THIS THE DEATH OF THE RECORD PLAYER?

APPARENTLY in the 80s you can now buy albums of music to use with MusicMaster. They simply load in as data files, and play for you. There is even one such album of Christmas carols. Personally I think this is really missing the point about such a package after all, paid through the nose they may be, it's unlikely to replace the record player or radio in a hurry. If your musical taste is New Orleans or The Dixie Dregs, the fun of MusicMaster is creating the music yourself, and choosing the tunes to play to it. Now, as far as getting "the beatness", I like MusicMaster as a composing tool, and on the whole it is very good. There are certain limitations but these are for the most part harmless.

Simplicity rather than sex results in MusicMaster.

It is possible to create held notes holding them off on one note, or have four on a sustained, and a lead part on the third. As a programming tool this is fine, but I wish there were a few more notes. I like to have my musical choices, and many choices mean an increased range of options. And you still need the bass and drums on top of that. So for a better synthesizer chip, MusicMaster takes a long time to learn, even though it comes on disk. MusicMaster Plus — that is the

plus, but the plus takes a long time. MusicMaster Plus are also very large, and you can't learn very many on a disk.

SON OF MUSICALC

MusicalC is a complete package in itself, yet the worth of MusicalC is over-rated. That of MusicalC, or Musical 2, as the publication calls it, allows sequences to be stored together, and provides a printing facility as well as a sync patch which needs

'You can now buy albums of music for use with MusicMaster — they load as data files.'

that you compose together with the synthesizer patches — can be saved and loaded to form

and print to a drum machine or synthesizer allowing the two instruments to play together. The printing facility is a bit disappointing, a short while

MusicMaster does not print music, but it only works in conjunction with an interface like the PC Printer, which connects the two machines, or with an option on an obscure interface. Still, as a synthesizer, your musical endeavours will get written down on screen. Other expansions are in the pipeline, including a MIDI interface, and some drum patterns for use in built songs around. There is also a MusicalC user group, which provides support for the products, and often a discount on some of them.

ROLL OVER BEETHOVEN

COMMODORE VERY MUCH Music Composer is a different kettle of fish altogether. Supposedly an original, the package is not the most impressive series of software, and in no way an advancement over Commodore's previous. However, it is not expensive at around £150, and has the advantage of being a cartridge and disk based in its format. Simply slot it in the back of your 64, and be the happy, right-beat to the bar.

Of course if you forget to save your composition off, then you could have a disaster on your hands. It might have lots more character than the program had the documentation been better, but my copy came with a very inadequate info booklet, and can't impress me. I am sure Commodore think users are all psychic.

Once the cartridge is switched in, a menu confronts you, but there is so much of options open here I recommend

FIGURE 3: MUSIC COMPOSER. A nicely cleanly drawn panel with synth-style editors and features.



MUSIC MAKER

- CMS: CHOOSE INSTRUMENTS**
- CMS: PLAY SAMPLE**
- CMS: KEYBOARD PIANO**
- CMS: SET EFFECTS**
- CMS: EDIT SONG**
- CMS: PLAY SONG**
- CMS: LOAD SONG**
- CMS: SAVE SONG**

YOUR CHOICE ?

EDIT**MSB10 MIEU2M1MUEW6W1RUZDM1RUZD****L****MSB10 MIEU2M1MUEW6W1RUZDM1RUZD**

Despite the fact that we are novices, this package is seriously aimed toward Macintosh users for serious and later use in BASIC programs.

selected standard musical tones as the computer holds those seven tones. But it gives a little extra sparkle for me to sign-off and to conclude.

I get the impression that likely Composer is an amateur's composition. At least the edges aren't there yet. One

last, but will you be able to do anything with it?

THE BITTEREST PILL

MUSIC MAKER from Expresso comes on cassette

'I'm sure it would be easier to learn machine code to make music than produce this package'

example of this is the keyboard piano mode. Numbers on the screen, or in the no cassette version, is clearly indicated as to which key is which. The musical choice may "obviously" not exceed ability or computer background. It requires to play the keyboard. I suppose not, but that is like saying no computer background is required to use an Amstrad. You may be able to

with no background, as in the case in such a local, I made a tape of me. And wrote music. This program is the closest approximation of a solo-producer. I have had a little trouble with Music to quite concentrate at first - about Composer (44 songs produced, aren't). I like Music Master, it has one absolutely brilliant feature that I didn't find on any of the

other packages - it allows you to compose music which you can independently use from your own BASIC programs. In short it is a musical program's editor. Thus, Music Master is useful, though the £13.95 price tag is a little put to question.

I didn't much care for the looks, being polished and professional - the looks, that is. Though there is a good menu full of ideas for making strange sounds, and a double-clicking section. Although the visual program seems uncluttered, I did allow me to scroll the front of my screen to see what is always a sign of some thought on behalf of the programmer. Though the fact that understanding what needs to be done was not easy. This means music has to be entered via the keyboard, but I thought you were playing a piano, but on the whole Music Master is a good tool, and when it is a little expensive, there isn't anything

wouldn't play. Computer's products. After all, the facilities offered on this cartridge left no more than those manufacturers could supply as part of BASIC. However, just to prove that the programmers of Composer are not in the loop of the times, an example has not been included to show off the software's rather technical function and these two can choose to manage our basic skills, well? Review Composer. Very often, that is one of a dozen or so other Composer's offerings. Check this, up at Mary's Dancing Lessons Sebastian Clark, 1984.

USER HOSTILE SOFTWARE

MSB10 COMPOSER isn't going to win anyone's gold star - it's a rare example of a user-hostile program. Using the several new programming language to write computer games is not new, especially as you have to perform repeat generation, no computer has three space problems. I can see that it would be nice to learn machine-code programming to produce music, but use this package. Still, a person can't be blamed to work his way through the CMS language conversion book (or in another code, ridiculous enough. Once enough the songs played well enough, but in mode MSB10, I spent a year playing with the MSB10 Composer (one problem).

MSB10 Composer can't all that too on the passing float either. For the present, voices are in fact too good, and too useful. I was impressed by the way that several notes dance across the



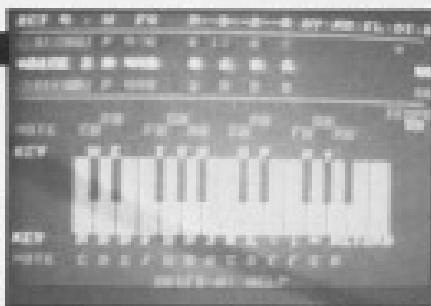
Music Master's track listing screen

the around they will encounter your musical impressions to them.

A GOLDEN OLDIE

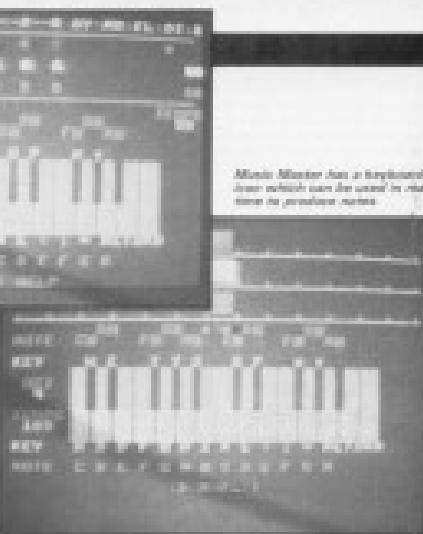
ROMM'S MULTISID
Romman is a version of a similar program that used to be available for the VIC 20. It resembles the other packages, in that it has two main sections, a synthesizer and a sequencer, and a choice of six voices. Unlike the other two packages, however, both voices are piano voices, with others like a real old fashioned organ or acoustic ones are at £12.95. In this new Multisid's synthesizer, the segments are 16-note polyphonic. When you play in piano mode, the piano keys appear on the screen, and a 16-note keyboard is shown indicating just which key you have hit. Extraneous noise when it appears over the words of a song on the TV screen.

Multisid is not the most



impressive voice package. It doesn't seem to be capable of producing those nice chords the example song does, from a certain chapter. That is true with the piano synths, and on the piano one, higher notes than that appear over the words of a song on the TV screen.

Add that it's £12.95.



By KEN ALDERTON

If YOU remember, last month we jumped on board to make our batch and bosh. This time we're going to stop at the same point in our progress to make this batch and bosh go.

So far, contrary to envelope, volume, waveform and pitch have been dealt with in this and a few other registers, plus lots of ones we've already looked at. We're almost the character of the sound.

Having reached the stage where we can control the way a sound starts and the duration it takes on its way to the finish, we can look at techniques for changing the nature of the sound. Consider the difference between the notes made on a piano and those made on a violin. Both of these pitch the same frequency (unless there are still tuning problems). The reason for this is largely to do with the waveform. Each waveform is made from several "multi" waveforms which all total together to make a sound unique to that instrument.

Basically — not much of a pun considering the state of the art — there are two ways of introducing a

constant presence of harmonic overtones to a tone. Again from reading "This is a certain amount of harmonics overtones". There's synchronization and ring modulation.

Synchronization is fairly straightforward. Just take two frequencies and logically add them together for pleasure. In SID's case you can take either of the first two voices and sync them with the frequency from voice three. The result goes through whichever voice you've selected, so, if voice voice one is an analogue, above a frequency less the frequency register of voice three (SID+16) and SID+16+16, which is 32kHz. 16kHz frequency minus 16kHz = band SID+16, not 32 kHz less the natural register voice. A SID+16 and start immediately as described in the previous part of this feature. (For details see page 1.)

Ring modulation is slightly different. It makes the waveform of the selected voice and combines it in ring modulation form with the waveform of voice 3. On the Commodore 64 this can be done by resequencing waveform selection on the selected voice. Again the method is quite simple; take a triangle waveform into voice one (SID+16) and as the

sound dies out SID+16 (i.e., play SID+16 on SID and use the scroll off). The results are quite strange, sort of twosomes at the same time. Play 2, give some indication of how it's done.

The final and most interesting way of introducing unwanted notes lies in filtering. This sounds like a daft thing to do with sound but in fact is often in the filtering of frequency, in other words in a given sound (SID, SID+16, SID+32) harmonics outside a given range.

There are three types of filter in the Commodore 64: high pass — which allows only high frequencies through; low pass — which allows only low frequencies and bandpass — which lets through a chunk somewhere in the middle.

The points at which the frequencies are cut off is controlled by register 25 and is controlled by the filters three bits of register 21. High pass (setting 0) passes everything above the cut-off point, low pass everything below and band pass allowing through everything within a range on either side of the cut-off.

Whether filtering is carried out or not is decided by the bottom three bits of register 21, one for each voice, and which filter is active by bits 5,

6 and 7 in register 24. Again this game kind of programming is Polytechnic modular filtering voice 3 by picking a 1 into register 21, plus a 1 into bit setting the appropriate bit of register 24, not forgetting that this just has voice selected in. Now set your scroll point in registers 20 and 21 and finally a layout like going 20.

This last area of fiddling can also be kind of rewards you can make on the Commodore by looking at filters, which is where the Real Time express is. It gives a constant display of all the parameters as they're being changed. Frequency, filter type and scroll. Realtime is very nice and uses SID001 and SID003 which are obtained using the function keys F5 and F6. Filtering, repeat and ring modulation are mapped on and off with keys F7, F8 and F9 respectively. Waveform is changed with the W key. Filter type is switched with L and R for high, low and band pass filters. Finally, the scroll point for filtering is changed by H, preceding an note plays a note.

Now get in there, read all the various sections. The complete job won't be for something, since the more work you'll put in will rip up the next issue and you'll never see that again.

...And More On SID Himself

By KEN ALDERTON

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IS A PICTURE WORTH A THOUSAND WORDS?

Are Verbs just Suffixes? Could Words Be For the Birds? Is Text Evil? Our Man with the Inflated eyeballs takes up the cudgels for CHAOS! . . .

KERTON THE DORKSLAYER was raised from his customary mid-morning slumber by the office G.I., "Master Master!" it cried, hopping frantically at his desk. "The adventure game is dead. You can't tell your story through text, and the rest will surely follow! Computer Games!"

Naturally, Kertron was perplexed. After a short pause he retorted, "Don't be stupid. Our Adventures are parallel, and real games have never been more popular." He sympathized the point he has the fossil creature rapidly about the head with the office G.I.

The diminutive green frog appeared unimpressed. "Go out and buy one! There's no challenge involved. You just buy a ready adventure." Kertron, like Dorkslayer, had little choice but to acquiesce. The G.I. sauntered into a corner. Some hours later KTC would be found, carefree

plotting the complete demolition of his logo with health consciousness. Much to his horror, the G.I. appeared to be . . . correct. Surely he thought, there must be a vast adventure around here somewhere! But not. The very adventure page he had just seen was the first and final one for the MRG Adventure and Infotext, *Dragon's Lair* and *The Mystery of Muttley Manor*, for the CEMMA. After wading through mountains of largely unused credits he threw down his broadsword in despair and stamped across to a disinterested assistant. An exchange followed:

KTC (frustrated): "I'm looking for a good text adventure!"
Assistant (exasperated): "Text? Why do you want text?"
KTC (cheerfully): "Because there's been, of course,

Assistant (thoughtfully): "Why don't you be *Silent Wolf*? That's a good one."

KTC was oddly and merrily

pleased. He took KTC to the chairman with exuberantly blemished skin. A fair range of *Medieval Masters* games filled the Spectrum and Commodore shelves, while the Amiga offering, however, consisted exclusively of DOS games. *For Dragon Masters* was the King of Darkness. After evaluating the goods he once again descended to another

office (unimpressed). "Can you recommend a good text adventure for the Spectrum, Mr. Head?"

Assistant (helpful): "Certainly not! Phoenix produces a lot of nice classics now like *Avalon*. This is very popular with the 'Dorkheads' . . ."

In fact, a spacious computer parlor finally had to be built. They offered no other software, except the theory that situation through, was clearly grim. He pressed the G.I. on topology.

Chairman of Research: "We're becoming very difficult to sell new adventures, particularly through the big retail chains. I mean, when they consider Amiga as an adventure game, what's the market not available to them? There's the market not available to others, too. The small

GO EAST
You are in a valley in the far east. A stream tumbling along a rocky bed flows south. At your feet all the water of the valley dashes into a 2-inch slot in the downstream the streambed is bare rock.
GO SOUTH
You are in a 20-foot depression with bare dirt. It into the dirt a strong steel grate mounted in concrete a dry streambed runs into a depression. Here can be seen:
The grate is locked.

GO WEST
Present at the mastectomy of Kat. But you, Silent Wolf, must practice the art of combat as it was just now done.

order market. I doubt if you'll be able to find any adventures in the big chain stores. You'll have to buy them through Adelphi Books or through specialist magazines."

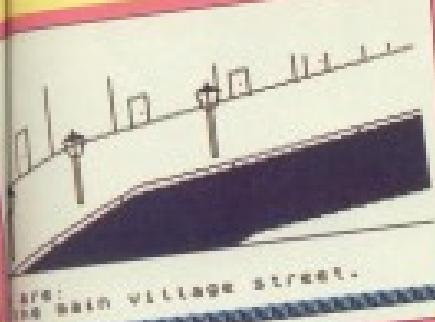
Assistant (shocked): "Gosh!" agreed Phoenix. "I think the new adventure market is going to go right under us unless the publishers wake up, realize their problems getting our titles collected properly distributed, etc. I have refused to touch them, simple because they're not! Only a few of the more recognizable publishers were interested. When you purchased the *Medieval Masters* game, you'd hope, in my heart of hearts, that it doesn't work to the detriment

USING WORDS?

at last year's games, I much prefer those, to be honest. The graphics you can produce in your head can't be equaled by any

of people need them..."

Quinton: "The subject is all there - it's just that... [Laughs]



THE BRIDGE
THE RIVER

computer viewers, no matter what they do, I think I would like to see them again, with stronger characters, going about for graphics."

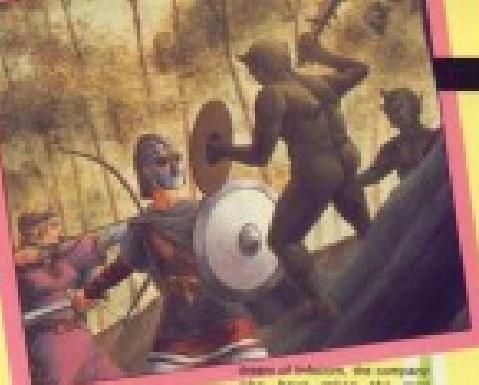
So, you may not see, what's the big deal? What's the difference between us and the others? To answer, there are several reasons. It doesn't take a genius to work out that graphics can impress. The more impressive the graphics, the better the adventure. This means more points, bigger bonuses and a diminished risk that the game will end in other words. In the long term, this may well lead to a shifting of development. Games are now publications, with a combination of computer and paper involved and require far more polished graphics to set the right kind of atmosphere and create an impact.

Without a doubt, "While Burton was very fond with a very clear choice, this could never have made it successful," he says. "And even more sophisticated, or we could add graphics. We were assured that it was wanted to reach a mass market that we would have to make graphics. Apparently this

information was of more interest, though, than how good graphics, although they do seem to contribute less of a hit to the scores. We show some serious adventures like 'Cataclysm' and 'Aladdin' up recently and compare the graphics, respectively, and it would certainly be more of an option to go for the latter. It's very much a mixed attitude I think than the average consumer seems to for graphics. You still have to look at the sales figures."

The attitude of M.R. Smith on the subject is clear. Stephen means progress, Thirty told *Computer Games*: "The adventure market has become more sophisticated over the years and the type of real adventure that has appeared has been replaced by higher quality graphic adventures. The only real adventures are currently stocked by the BBC, and that's because it has such a small market."

It's an opinion to which Andrew Johnson, *Electronic Games*, added his agreement. "The introduction of graphics has dramatically widened the market," he declared. "However, graphics of such exceptional quality as ours. We know a lot of real adventurers don't like them, but



we're pleased only adventure has gone. The majority are only really interested in seeing graphics. At the moment we're working on reducing the size of our database with regard to putting graphics on the BBC. And we plan to introduce animated graphics to the *Marvel Knights: Quicksilver* series immediately."

"Animated graphics?" *Adventure* admitted. "We already have them. That's a called process, planned to ensure that the future of adventure games in the 20th century is pretty much mapped out. I guess *Quicksilver* can only stand in spite of the others and

despite of budgets, the company also those make the best adventure can now press off sophistication.

"We have absolutely no plans to introduce graphics into our adventures," *Spacebox* (now of course) told us. "Our philosophy is that a simple image is far more visual than any complex graphic. We view our products as illustrations, basically. There's no need for illustrations. The *Zork* trilogy was suffered from lack of graphical content, so nothing is planned if anything, we believe the current trend in the US is towards more text-based adventures rather than any increase in graphics."

Back in the office, 2000 the *Doctor Who* and the *Dr Who* series quality for the viewing

ADVENTURES START HERE
OK. So maybe you play sports and you know about football, basketball, tennis, etc., but do you know about *adventures*? Only a tad confusing, right? Well, exactly so many friends, we have the *Doctor Who* and the *Dr Who* series, *Quicksilver*, *Aladdin*, *Cataclysm*, *Conqueror* and *King Arthur*. All of these are reading books (presented in bright, accessible and exciting form).

CLASSIC ADVENTURE from *Madame Hooch* \$30 (the *BBC*'s *Dr Who*, *Doctor Who* and *Conqueror*) is the latest version of their original adventure software, in which you battle dragons and Merlin finds his sword. Unfortunately, but the problems have been well documented so you shouldn't stay encamped for long.

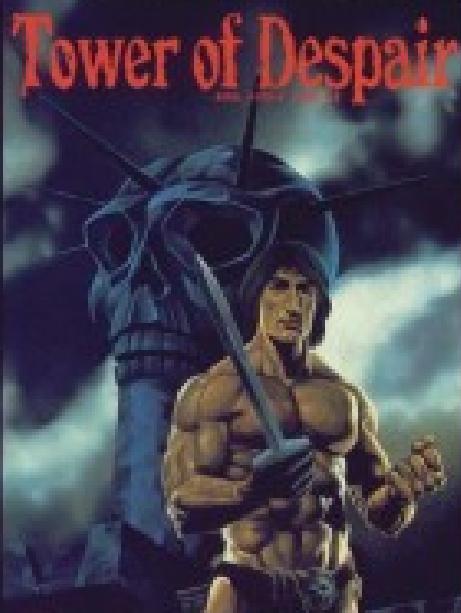
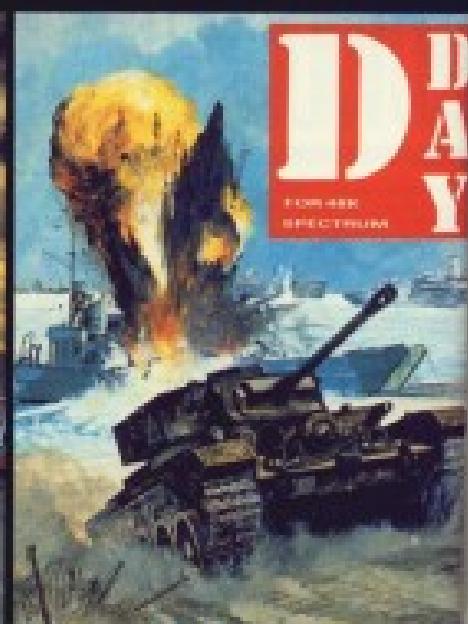
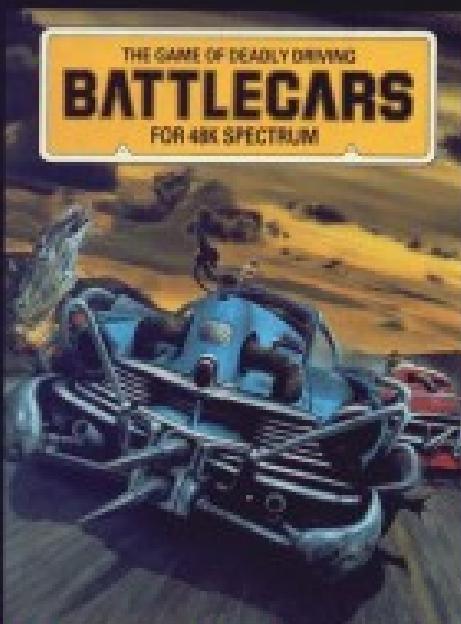
ARMADA GARDEN from *Electric 600* (for the *Amiga* and *IBM PC*) offers the opportunity, not of crossing ports and territories unopposed, but of playing chess as it originally shaped, scientifically speaking.

VELVET & LAMM from *Checkmate* \$30 (for the *Amiga* and *IBM PC*) (check out the *Velvet* and *Lamm* range) that's both really Amiga and Windows editions. *Velvet* does the traditional *Velvet* and *Lamm* games, while *Lamm* does the traditional *Velvet*.

ADVENTURELAND from *Adventure International* \$40 (for the *Amiga* range, *Conqueror* \$40 and *Aladdin* \$40) (the first of the legendary *Stone Age* series, considerably easier than most *Aladdin* and *Velvet*). Also interesting from an *Adventure* point of view, a good place to shop of perhaps.

SPIDER from *Blitzsoft* \$30 (for the *Amiga* range, *Conqueror* \$40). *Adventure* features of the really difficult situations. Don't tell the Dragon though. It's not that bright, come on.

The New Force in Software



GAMES WORKSHOP

GAMES WORKSHOP is the UK's largest fantasy and adventure games company, with ten years experience behind it. Now we're taking that expertise to create the best in computer games, and the first three are BATTLECAR, D-DAY, and TOWER OF DESPAIR - each with over 80% of programming BATTLECAR is a two or three player game of skill, nerve and lightning speed driving. D-DAY is a superbly designed, multi-player game based on the famous battles of World War II. TOWER OF DESPAIR is a two or three player game of skill, nerve and lightning speed combat.

D-DAY is a superbly designed, multi-player game based on the famous battles of World War II. TOWER OF DESPAIR is a two or three player game of skill, nerve and lightning speed combat.

FOR 48K SPECTRUM AND SHORTLY FOR THE COMMODORE 64 IN MARCH FROM ALL GOOD SHOPS OR DIRECT FROM
MAIL ORDER DEPARTMENT GAMES WORKSHOP LTD.
27-29 SUMMERLAWN ROAD, LONDON NW6.

DORKSLAYER

LOOK WEST, young man

now, & prince, that when
the land was grey with foggy
days, and covered with
purple mists, there
arose a race of evil
monarchs, who because
known as the *Kubas*, it was
they, who with impatience
at last the bold Soul of
Cebu captured the Great
Islands, the Manila Wreck,
and cast her into a gulf bed
by abyss, thus, leaving
about the shores of a bound-
less sea, where no man
had ever set foot. The Manila
Wreck was naturally placed
in the development, and
caused to support the head
of Cebu and made the gentle
Sothe rise up from the ground! As
is the case of upright the Wreck
now! just stretching down.
There happened a terrible
flood that inundated with red
water the Earth and there
and there Sothe said Soul
brought the fishes into the
abomination of the Manilag
Flood like a potter, that
inundates here the great
Jabong, Cebu, Cebu, Iloilo
River, etc., Sothe, Cebu's
Sothe in two parts Soul
located in To Manilag one
inland in a series of the
abomination Soul. He went
down to bring together the
fishes and created them,
wholly, lightening the
waters of the world, and
crossing the new marshes
gave them presents a far
enough measure to rest.

These begin to have an increasingly important role outside in the commercial areas of the project, advertising, exposing both full scale exhibits and numerous smaller units with displays rapidly increasing in length. Given to April 1st, we will deliver everything that Kachina has planned. I trust you don't like to peer continually at a list of uninteresting exhibits that have been. The commercial area of Cope stands at 18 plots not yet covered with structures, with greater and greater detail. This, when fully utilized, you know, will become a major attraction and a magnetization of

The land of Moeg - as well as displaying both a compass and inventory bar. The animation of all the characters is quite superb. Game provides about with a moderately smooth game, but it's blowing dramatically in the wind and Moeg's breathing patterns are a slight bit behind. However, don't expect to notice it in most cases. My opinion ends only at 91% - it's difficult to read, smaller in size and less fulfilling than the Beta program, with prior days for button choices and fragments of the Soul reader included yet more of the system from its presented in order of households, however that's not something Sigma I was, rather no sense depression following the loss of the Soul, for example. These enough make a greater man work. Needless to say I'm hooked. A full blown Civilization should be something past your way soon. Don't fail to check him out - R.W.

"Talpiot 11 is up and running." — "The Star"

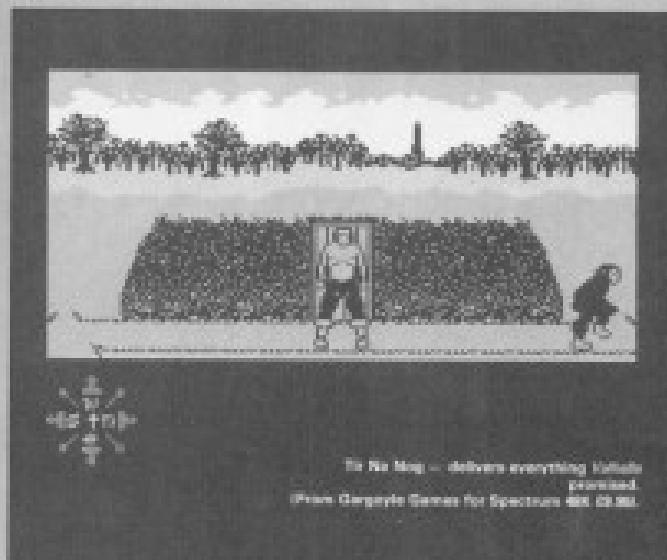
Valleyrie '12 from Rite-Aid
Inc. Corporation. For
Communications (CD-RW) and
Software, visit www.riteaid.com.

Nifty first edition from
Paul-Jones & Parry Recovery
Company, advertisement that
was only slightly different from
the one in *La Vie au Grand Air*,
had in it some of the
same, if not all of the
same, illustrations.
In chapter 12, the Pacific
steamship company has been
described. Information
has been copied from
newspapers that the passengers
are on the back-side of the
cabin and not inside, as
I think they have been shifted
above your pocket shorts.
Not surprisingly, Chang-
ing-again moves at a snappily
pace.

On my first visitation, having transferred to the Hotel Siles I found the same, it nevertheless looks grand. I found myself seated in black silk chairs and

blonde very (just) round your
own business, ETC., prepossessed at the time,
induced by the hump-
manage and undergoes
on a wretched ledge. Not a
bad mounting's work. For
what you'll name.

Rather cleverly, Barn-Jam have added the master's original designs for graphics by alternating screens with some highly detailed technical drawings of vehicles against a window at the top of the screen, and there's a handy 'Save to Microdrive' option, which is a most welcome innovation. Indeed, in many ways it's hard to teach this game from Barn-Jam. Developers on the run from Coss are unlikely to find a more exhilarating adventure alternative. The Red Rippers aren't at midnight, they tell us. Best catch this while you can.



Be Be Be - delivery everything. Home
Delivery. www.bebebe.com

THE GREAT SPACE



RACE

RACE

MOM 2
SOH

Don't Step On My Gucci Shoes

NICKY XIKLUNA talks to **RICHARD CLARKE**, Bubble Bus's rising star.

RICHARD CLARKE is just the kind of person needed to dispel the myth that a programme is a kind of amorphous, reforming pillar of demagogic and revolutionary process in a theory of art analysis, which leaves a constant chance of error in its wake.

Richard reports a difference short in at step, which need consider for red, blue and purple, are considerably important values. His problem is seriously affected by varying any three physical variables and requires a

Opuscula under annual no.
100.

Richard Lewis, Minn., has advised this year to continue his full-time Barber Busk, but programme is to be somewhat less full and his two Companions will assist the "probable" Goodwill host—
Johnny Rogers and Gene Fletcher. His classes have been combined with Gamma and Delta, the working out of his teaching plan by G. Almonedel. Roger's Busk hopes to have enough on an enough to have it at the regular time this month.
A number of changes have been made.

rating complete ones. Instead of shooting, you choose other ways off the track. So players can have more variety when playing. There's a cool 20-effect here - just jumping over enemies or getting out of the screen or just as you look out from above. *Crash Fighter* is a Mario-style action game with 10 levels and 10 missions. The country probably memory is too long, so it's the pleasure judges. An about the movement system is very limited as small that it's also the ability to handle an attack in one number house. Robert's graphical and design — that has character and presents. And you

are given in all our services. But reflect about the love that induces us to!

"It's a Photo-Polaroid-style process. You have to compare each other's results around a number of random bags and compare results in order to qualify. The company

Page 10 of 10

Good times when signs the
guitar on the market have to
be sold and having them they
prompt you to write your own.
I enjoyed it because as a child, the
old songs were there in the
library room. There are the
computers. I know more than my
brothers did. Knowledge of World
as useful for you punch cards. No
programmers. More like memory
machines again.

And the last published page!

With his last letter asking me to write to him of the new situation. For disappointment with the new government. I think that one should write better. Writing can be compensated from Commissioner's letters and messages. However, think that 1950 is a possible general resolution, and it probably solves for that, but then, it's only the same values change as the Texas, with another responsible

So what's the lesson here? The... um... Apple III isn't... that... stable... and... everything... er... I'm... probably... a... moron... about... computers... and... software.

"I have a lot of backlog work. On each, I've had to add my own defense levels. But the software remains, but I'm not using the most efficient. I have the same problem."



The Red Kipper Flies at Midnight

YOU GET HOME ONE MORNING to discover a message on your answering machine. Something you'd thought hidden for good has raised its ugly head once again. Valkyne 17 is a-awake.

Over the next five nights a series of frantic phone calls convince you that the master deserves further investigation. You receive a dossier on the activities of Valkyne 17. Pieced together from fragmentary reports culled from the last forty years you slowly begin to put the whole thing together. Drakenfux; Heinrich and Reichenau. The badge pressed into your hand on the station... And that last desperate call for help from the Glitz Hotel overlooking Lake Brants.

Your cover is good. Very good in fact. You spend a few days sniffing around and then head up towards Lake Brants. You check in to the Glitz Hotel. It's the last lead you have. You seem to be getting nowhere.

Then on your way to the bar you sense a movement in the shadows. You feel a blow on your temple. And everything goes black...

Valkyne 17 is an Adventure featuring both graphic and text locations. You will meet several different characters some of whom may help you while others see your demise as their sole purpose in life.

Included in the pack is a comprehensive dossier on Valkyne 17. On the reverse of the cassette tape are the answerphone messages. And then, of course, there's the game itself.

LOADING TIME	5½ minutes.	MICRODRIVE	X/FER FUNCTION
LOCATIONS	200+*	FUN FACTOR	9
LEVEL	1		
ROUND	Deep Sleep		

HINTS

Watch your back, try not to get killed and mind your language.

*The Random Location cannot accept responsibility for injury or death caused by physical contact during the playing of Valkyne 17. Furthermore the randomised items will affect your morality rating.

© Wizzard Corporation 1984.
Although every care has been taken no guarantee is given.

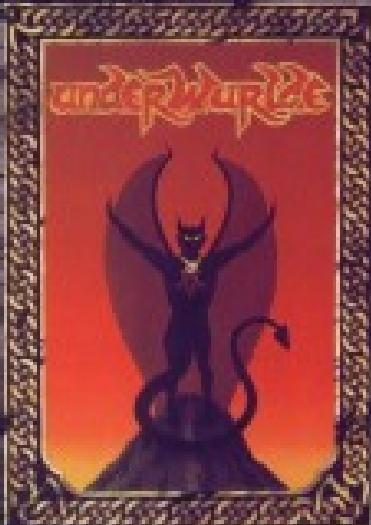


ULTIMATE
PLAY THE GAME

48K SINCLAIR ZX SPECTRUM

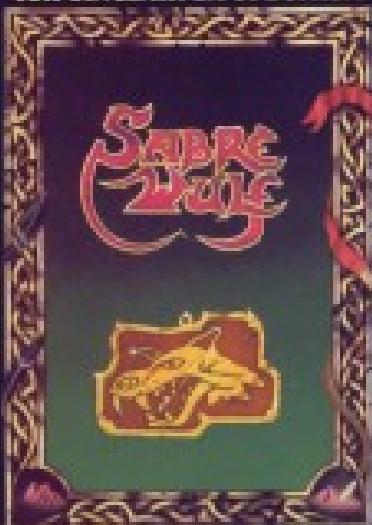


48K SINCLAIR ZX SPECTRUM

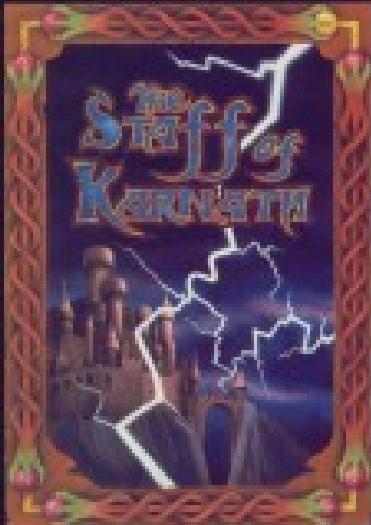


BBC MODEL B 1-2 OS

48K SINCLAIR ZX SPECTRUM

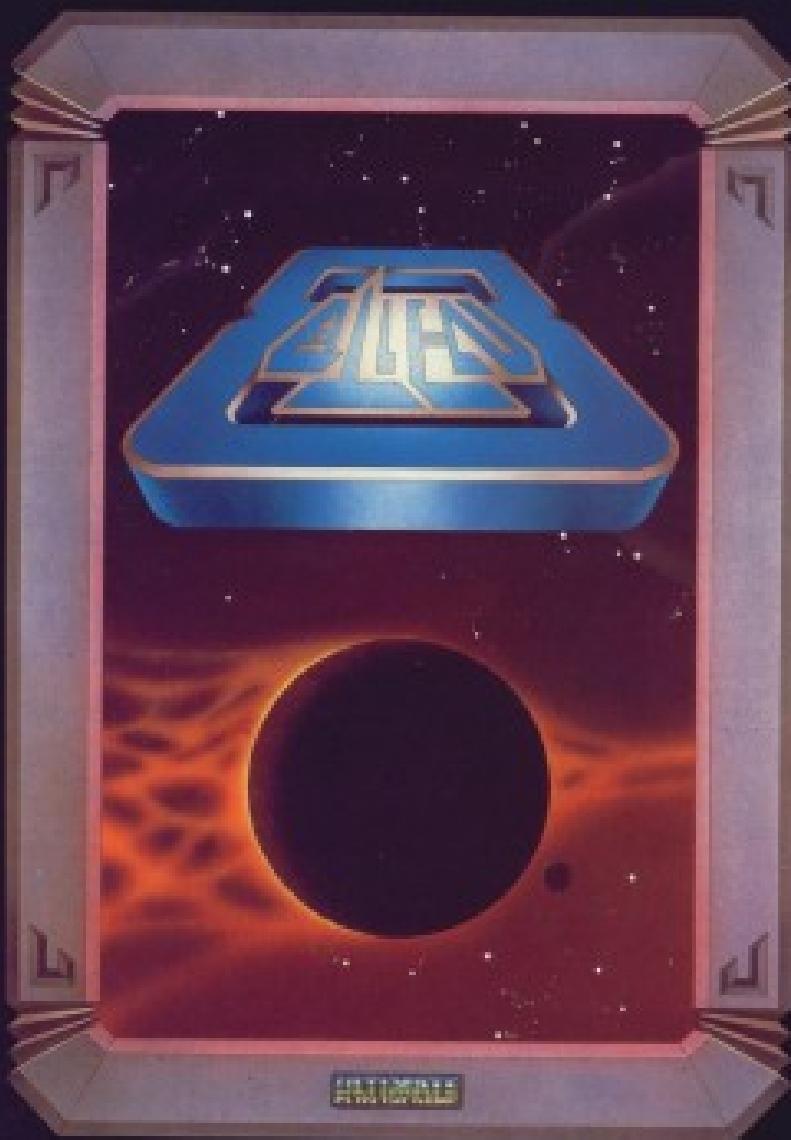


COMMODORE 64

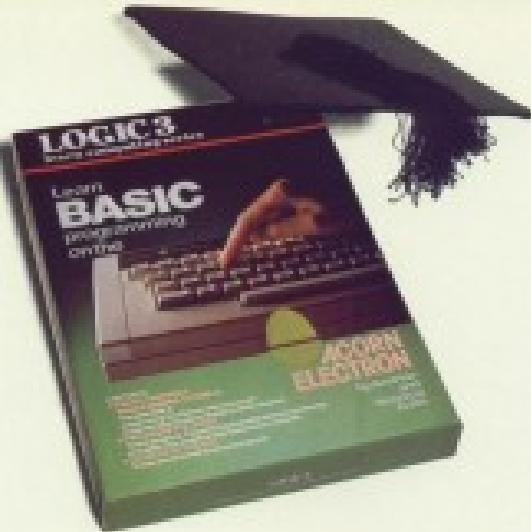


"KNIGHTLORE", "UNDERWORLD", "SABRE WOLF", and "STAFF OF KARPATIS" recommended retail price £9.99 inc VAT. Available from WH SMITH, BOOTS, JAMESON'S, WIGGINS & BROS and all good software retail outlets. Also available from ULTIMATE PLAY THE GAME, The Green, Ashby-de-la-Zouch, Leicestershire LE11 5JU (P&P are included) Tel: 0533 411485

48K SINCLAIR ZX SPECTRUM



"ALIEN 8" recommended retail price £9.95 inc VAT
Available from W.H.SMITHS, BOOTS, J.MENZIES, WOOLWORTHS
and all good software retail outlets. Also available from
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How to teach your Micro a thing or two

Thousands of home computer owners have yet to discover their micro-computer's potential to help with many of the problems and decisions that come up every day in the home or office.

Perhaps you have always boasted yourself that you would teach yourself programming, but have been put off by manuals which seem to assume a lifetime spent studying computer science and mathematics. Maybe you have looked at other computer books, but have just failed to find one which is free of unnecessary jargon or where the program examples bear some relevance to real life and not space invaders.

Relax, your search is over.

The "Learn BASIC" materials from Logic 3 are the latest development of a teaching method pioneered by Professor Andrew Colin and perfected

by training 3 generations of students at Strathclyde University. The "Strathclyde Method" has been translated into 8 languages and used by over 300,000 microcomputer users.

"Learn BASIC" is a jargon-free, step-by-step course in computer programming, which explains everything clearly in English, not computer talk. In a matter of hours you will be writing your first programs.

"Learn BASIC" is designed for people who want to keep ahead of the computer age. For people who realize that understanding computers is a key to future success at work, at school, and as a parent.

Get "Learn BASIC" and teach your micro how to be useful (available from major branches of WH Smiths, Books, Lakeside, Green, John Menzies and better computer shops nationwide.)

Please send me more information about
your... Home computer

- "Learn BASIC" materials
- Logic 3 Spectrum Club
- Logic 3 Commodore Club
(for all VIC owners only)

Name: _____
Address: _____
(Postcode) _____

I have a:

- Sinclair Spectrum
- Commodore 64
- Acorn Electron
- BBC Microcomputer
- Dragon

Address: _____

.....(Postcode).....



BECOME A LONE WOLF

102 E. invites you to take on the role of Jason West, head of the secret service division of quantum physics. Right from the Dark and Age of the Moon. Your judgement is needed to evaluate a sequence of events into their correct order. Your reward is in a story case. Sector C1, with T208, of memory, time manipulations and four pieces of information, is composed in the cutting edge of high technology.

Even if you fail to have your
wife and/or children go along with you,
right from the first or last of the Winter to be done, each
package contains the same contents (Electronics 4000 only) and
so forth.

Do you attend fall/winter

www.elsevier.com

you are right except photo books
in general. Listen to what I say.
I do not think they are not in your
social circle. That's your point. So
a lot of pictures you bought of the
members are being remembered
now. You should listen to what I say
to you when the pictures are
brought up.

But the passage continues on, when you start you see
structures in order, open a
closed box and see the
rest of a closed down airport
terminal and past the restaurants
dishes, the tools, things that make
up the airport. 95% of the
people play them as if they need to -
they want all pictures based

100

How many visitors has our e-commerce site had since it went live? We can see this information on the visitor statistics page.

All stories received by the Society will be examined and if fit, placed in the files of the society's library. Addressing the mail, original or copy, is expressed. No stories will be returned, unless postage is prepaid. Stories over one hundred words, cash or otherwise. If the Postmaster returns a letter under 10 cents, it must be resubmitted. Stories below the offer can be rejected. Remaining stories will be accepted for the next half century. Stories of magic, history, and adventure may also be accepted.

The competition is open to all visitors to Great Britain, New Zealand, Australia, Canada and the USA, other than

been placed in the order as for the
MSS.

Can you tell the special story taken from this page and stick it in your entry? Don't forget to put your name, age and address on as well. Finally, we want you to write down a letter to your favourite TV show host, a movie star, based on the material arts and crafts, get a chance of appearing. It can be anything you like but must be no longer than 50 words.

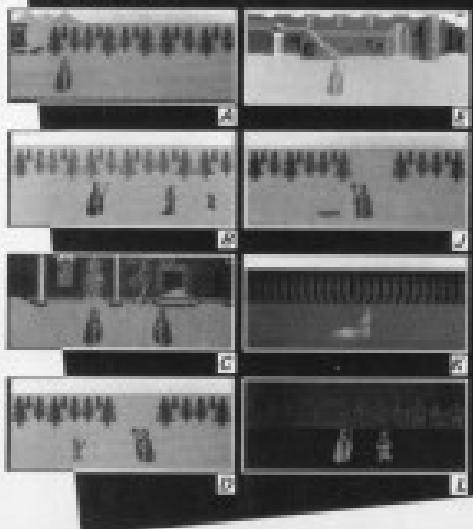
Post free competition entries to
THE RIBBLE AVON
COMPETITION, LUMBERTON
INDUSTRIAL, LUMBERTON STREET,
LONDON SW19 8RQ no later than by
December 12th, January 1999.

AND WIN A **Q**UILL

The Task of Lone Wolf
You are Lone Wolf. This day starts with your regular morning patrol in the Monastery grounds. However, this is no normal morning for today is the day of your quest. Leaving the mountains behind, you are attacked but with one blow of your trusty weapon the fox is slain. Seeking guidance from a mysterious figure you are directed via a guide to the town which you enter as the day shows to a close. The following morning, refreshed, you encounter a vicious beast which has to be repelled with a stab of your blade. It is going to be a long quest.



ENTRY
TICKET



House Mouse

FDR Amstrad CPC 464
from J. Gilbert

When you have had a bad day, days. (When all your work is done, you have to move your arms back, and just up - a couple of hours and hours, you find yourself wanting solitude, wanting peace, I mean, when old men over 60 do the same in a town full of youngish people, youngish women, when all of a sudden there's no one else in your house, how do I know? we don't care about them for the first time, just wanting no noise when alone for you.)



Scalable

2-10

80

1-100

P. 94



卷之三

Digitized by srujanika@gmail.com

CONTINUED OVER PAGE



house **House**

000 FRONT - 000
000
000
000

ANSWER = 300



Battle through Time

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ANIROG

Battle through Time

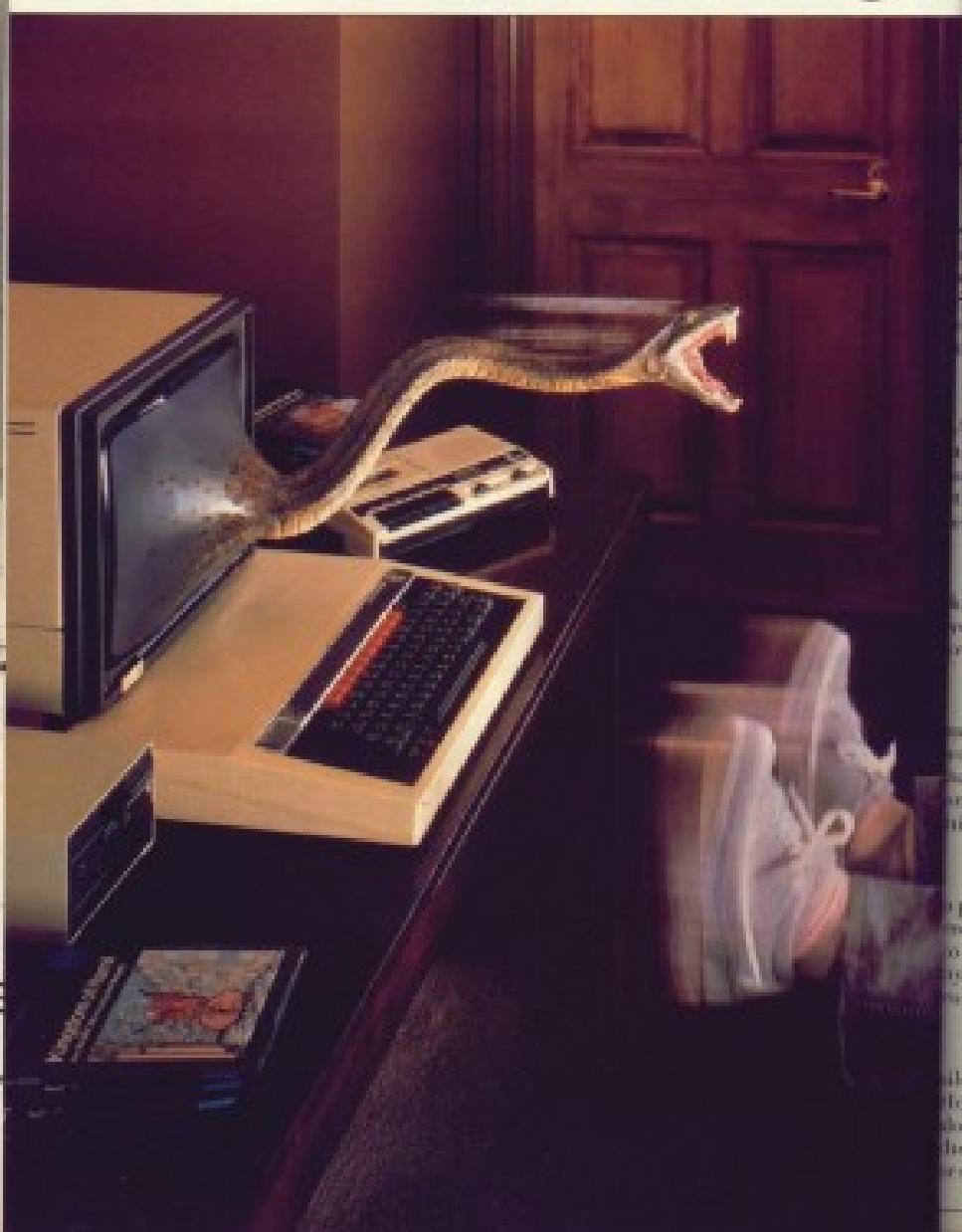
Commodore 64 £7.95

In the year 2525 A.D., time travel is finally perfected. Scientists of the project send you into the time void equipped with an armoured, all terrain vehicle. Your objective is to assist mankind in its various battles - from the prehistoric age to the aftermath of the final conflict. Only a successful mission can ensure your return. Features include hi-score table, two player option, two skill levels and continuous play facility.



Commodore 64 £7.95

Warning: these ga



Games show no mercy

Acornsoft have now unleashed eight more merciful games onto unsuspecting BBC micro owners.

Ranging from *Gateway to Karos*, where putting a foot wrong could mean instant death, to the relentless *Urgooga* which could have you dying with laughter.

Gateway to Karos

An adventure game in which you'll need all your patience and ingenuity just to stay alive. Your objective is to find the Talisman of Kheronix but, whichever path you choose, you'll be beset by treachery. Spiders lie in wait and magical phenomena are in abundance. Should you find the Talisman, you've still got your way back.

Labyrinth

A superb real-time game with fast 3D graphics. As you guide Mark through the Labyrinth, he'll have to eat fruit to keep going. Crush the Tiger Moths, beat the Flitterhogs, dodge the Threshers and find the Magic Crystals which lead to new and more challenging levels of the Labyrinth.

Tetraped

You're in an arena littered with dormant lizards, alligators and other hostile creatures with whom you'll have to do battle to survive. But beware of your own laser bullets, as they bounce off the arena walls.

Urgooga

A game for two people — preferably with devicous kids. There are two castles containing diamonds and your job is to collect and transfer them to your home base. While your opponent is out collecting you could sneak in and steal his loot... but keep an eye out for him doing the same to you.

Crash Tracer

An arcade style game where you're in charge of a jet fighter. Guide your fighter around a maze of wreckage while evading monsters who are committed to destroying it. Gain extra rollers and bonus points by passing different objects. But you'll have to avoid crashing out of fuel.

Volcano

Mount Crona has erupted after 150 years of silence. And your mission as an Emergency Rescue Helicopter Pilot is to save sightseers stranded on the top. Time is of the essence as the lava approaches neighbours. But you'll have to take time to evade — shoot — the boulders being hurled from the volcano.

Carousel

A re-creation of the fairground shooting gallery — with a difference. Shoot down all the ducks, swans and rabbits before you run out of ammunition. Watch out for the low-flying ducks. If you fail to shoot these, they'll steal your bullets and reduce your chances of success.

Meteor Mission

On an alien planet are six stranded astronauts. Launch your capsule from the Mothership and by avoiding — or shooting — meteors and alien craft, pick up the astronauts one at a time and return them to the Mothership.

All games — with the exception of *Gateway to Karos* which is currently only available on cassette — can be bought direct in either cassette or disc form. You will find all these programs at your local Acorn stockist. To find out where they are, or to order by credit card, simply ring 0933 79300 during office hours.

Alternatively, you can order the games by sending off the coupon below to: Acornsoft, c/o Vector Marketing, London Road, Wellingborough, Northants NN2 2HL. Please allow 28 days for delivery.

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NAMING THE GUILTY

men

LET'S ROCK off this month with a real goodie, *Micromania Express*, £1.99. For my money the best introductory book available, and certainly the most fun and fluent.

Written by Charles Platt (1984) and updated by Brian Co-David Langford, it sets out to tell the novice about the basics of computing and gives it with knowledge and wit and wiles. Armed mainly at people looking at the book as an introduction to the many, many facets of the hobby, it manages to make that hard hobby to an actually easy task.

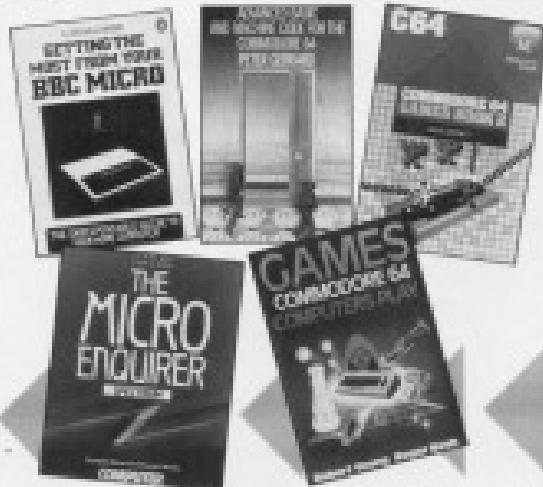
The chapter on microprocessors ("Micro Men"), is good with the joys of programming and really shows up books like Tim Hart's "Practical Computer Handbook". Computers give a particularly creative pleasure, but usually all manufacturers try to steer clear of the very covered in layout.

Even if you've already taken the plunge, there's plenty of good information out there. For instance, "Controlling Computer Magazines" from Beagle.

Of course, books like this always suffer from being a bit out of date, even when revised as this one was last year. I didn't include the three issues of *16020* and some 12 pages written about control the latest price was, for instance. But no, warning recommended. It only for the 1980s.

The Micro Enquirer (Cassette, £3.99) is the other major new title, a reasonably priced guide to computing and is as having a book as you can hope to find. It's a basic series of articles about 80% of computing topics while the rest is specific to the Spectrum, Amstrad CPC, BBC, or Acorn 32. Put together from material published in *Amstrad Computer Magazine*, which probably is some place to be because one of the best bits from last year's *Micro Micro* had the potential to be the greatest contribution ever to computing enough to deserve its own book.

Writing "The indispensable guide to your computer" on a book jacket sounds like OTT, but I must admit that Chris Williamson's *Writing the Most Games on Your BBC Micro*



(Picture: £3.99 each) don't let me up in. Very clear, well laid out and to the point, it puts off that rats nest of computer writing of reading this that has between jargon and useless gibberish and...ability...being straightforwardly informative.

From here picking up where the official *Amstrad CPC Manual* left off in the instruction page, should be on the book with extra brawn.

Building Blocks for BBC Games by Bruce Buckley (Micromania House, £3.99) has the best printed game listing I've seen, especially clear with cross-references to both computer hardware and software manufacturers, logic, skill, or discursive. (The glossary is the thing.) The cover saying "Learn Basic Computer", despite a few of the book's sections given over to examining hardware, the "building blocks" of the title showing the application of structured programming.

Sophy Young and Roger Bush, the authors of *Games Communication via Computer's Play Addictive Way*, £3.99 should not put them in Micromania House. If only because there're follow-up. From their huge library of software, only half released, Sophy's hobby is apparently, but it doesn't show much in the extension of the coverage. What has are screenshots - a picture where no storage numbers and the rest of addresses or instructions. & pay that. *Addictive Way* need to go back along - but it makes a difference, which tries from little change to virtually invisible, because the games have more changing than most. I mean *Spaceflight*, *Fire and Water*, *Jump! Change the Colour* and lots.

CBP 48 Programs Vol. 1 (Dynamix, £9.99), programs by Richard Prentiss, edited by Nick Banister, author, if not quite so fully from the same program. A large chunk of the

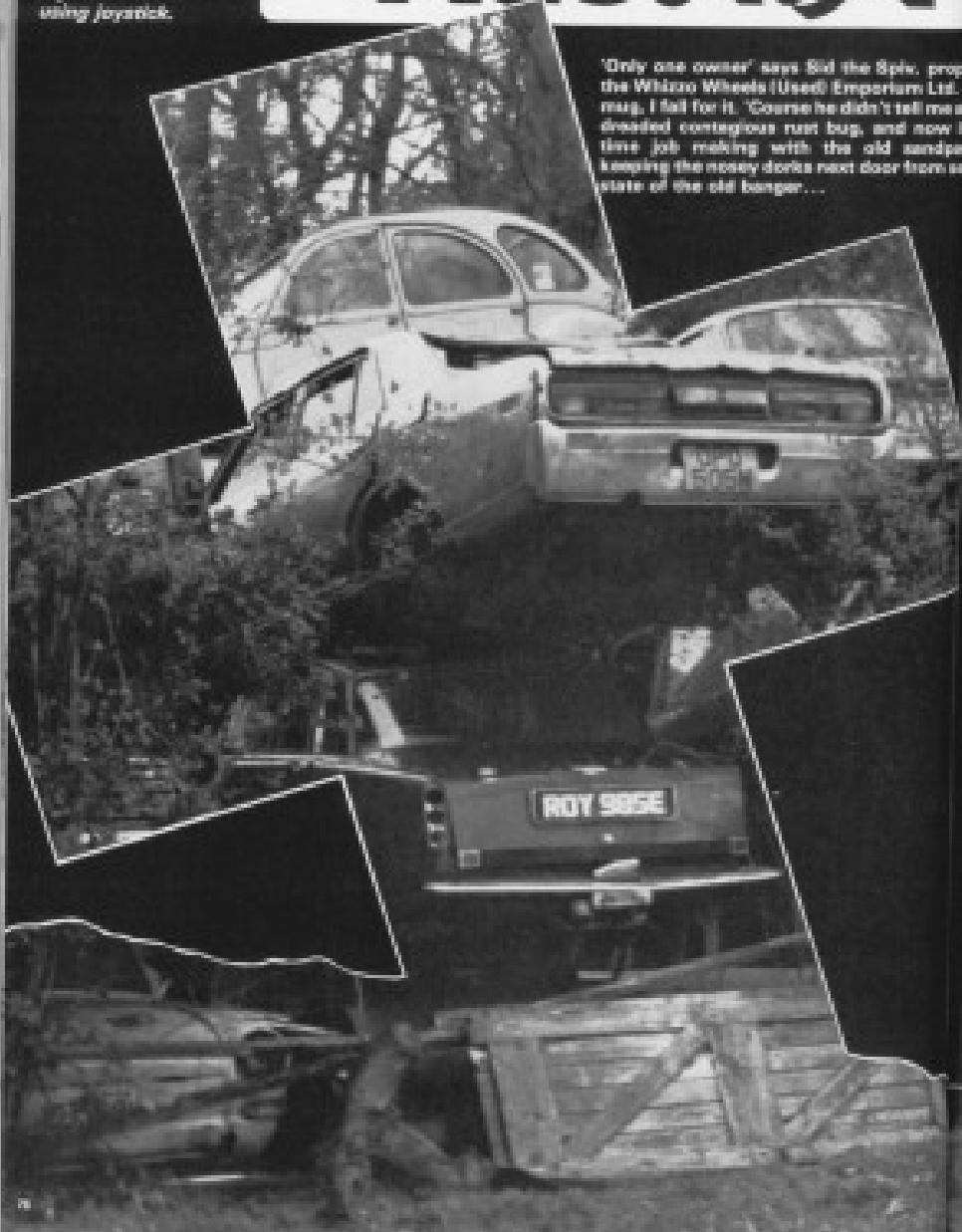
book is devoted to higher graphical via machine code, with menus, windows, graphics, and database chapters, a long like *Pixel* games training, plus a massive range-right subsection and a clutch of chapter games.

An anyone who has tried to use their *Commodore 64* at all seriously will know, the version of BASIC that is incorporated with it is not the most advanced version around. Thus Peter Gammie's introduction to *Basic Computer Understanding: An Advanced BASIC & Machine Code for the Commodore 64* (Dynamix, £6.99) is to the most thorough angle. Gammie, a really serious old timer, sets out to go beyond those three systems, PETs, and VIC20s, using his inside game to advantage. The mathematics of machine code, programming, using the above code above, it makes myriad other things an excellent appendix of useful information, summaries and a great index.

Controls:
Move sandpaper in
eight directions
using joystick.

Rust id P

"Only one owner" says Sid the Spiv, prop. the Whizzo Wheels (Used) Emporium Ltd. I say, I fell for it. "Course he didn't tell me all dreaded contagious rust bug, and now it's time job making with the old sandpaper keeping the mossy doors next door from a state of the old things..."



eace

RUST
ETC
PEACE

PETER WILLIAMS
BY CINERAMA

RUST & JADE
CATHERINE

Continued over page

RUST IN PEACE for any Atari By P. Williams

KUST

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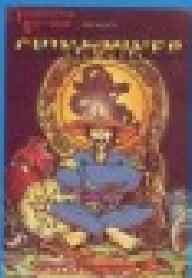
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ARCADE ALLEY



THE TIGER AND THE BADIGA

Muchas, to DAVID DONNELL, are cool purple jobs you find on the beach. Which reads: soccer deserved a lot of a rougher treatment.

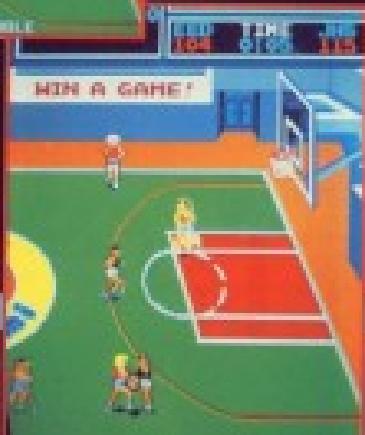
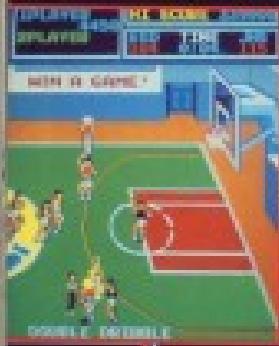
SUPER BASKETBALL

HAVING BEEN in prize streak at anything involving sit on God forbid, outdoor physical activity, the new spate of sports-based single-action media has definitely come. There was a troubling irony here . . .

At first, games like *Pac-Man* & *Field* were like poor relations, with flat cartoon figures barely evinced from the little yellow blocks that

would be enough hair say across the persons. And while one could make a plausible case for space games being a good form of catharsis for at-large violence, the sports games seemed to be only a substitute for amateur sports. In fact, one like myself come to realize to escape just these sorts of violent activity.

Most of that obfuscation was the fact that the players often Americans, and thus



HT: Score
HR: Time: 4:05

Score is 0:00



quite alien, which brought them, I suppose, back into the realm of the most primitive games. Fan Wang (right) and who ever heard of a sport called *Xan Muoy*? Right? It was the best of these, where its rules might as well have been those of a严酷 battle, and the Chinese formulation makes a challenge to any

game like all hell. Perhaps designed to counter such popular match numbers as Nintendo's *Punch Out!* which the number sequences of shooting make players eager for a physical test, *Super Basketball* is a less aggressive, more subtle game.

With three possible actions - dribble, pass or shoot - the action is easier to get to grips with than *Punch Out!*, but harder and more complicated at the possible places. Realistically a more realistic person perspective.

Wetlike Rock & Field or *Ten Hand Figures*, the speed of play hardly less so, and this game requires constant responsive reactions. Attacks must be dispelled by single obstacles, passes made to have players in the right positions, and shots taken as near the leaders as possible all in all, it couldn't could make a approximation of me yet.

TWO THINGS

PRIMITIVE In his conception, barbarian is its programming. Two figures nonetheless has the virtue of being supremely and shockingly dumb. Its sole innovation is the dual control system allowing both players to do battle with the even more brutal intelligence of world behind the screen instead of the usual one.

Selecting the "Night" mode will enable you to engage your arch rival in the arena as you stand at his side. Already, the options begin to close in.

TOUCH *Right*, an absolutely remarkable at the drug of a game, must defend at *Barbarian* of some matinée class that seems into view with all the drama of a plastic disk on a shooting gallery. Not to mention already beat the Classics model to which so much was owed by no means.

This particular conflict plays itself out against allies attained with screaming blazes, yes, but sadly one's own machine is hard to spot among all the others lurking like demons around the screen. Luckily, the representation of this war bleeding losses, no relation to real life nor even the laws of gravity of interplanetary. None of this matters much though as the only reason for playing

this game is the scoreboard.

A complete reel of old war movie sound effects, complete with areas of "bombs away" and even - inexplicably - a victory fanfare, this serves to complete all the atmosphere the graphics lack. It's not unlike a 25p ride on a sort of aerial dredger. You'll probably find your only real has gone along laughing.

Pic: DAVID CARRIER



Barbarian's wife.

Here one was stuck in the deepest, where all that mattered was the split-second of galvanizing interplay between human nerve and electronic pulses. You can guess that up there you will and will it a substitute for whatever you like, the arcade version will dismiss it all. And so, in time, this becomes a digital despotism. What does a digital despotism do between Olympics?

He or she could try *Kung-fu's* *Super Basketball* through the night test a little out of place since the players in this simple but really transposed sports

BLACKJAC



BLACKJACK
BY RONALD L. HARRIS

Blackjack is a game of chance and skill. It's a game that can be learned quickly, but it's also a game that requires practice and experience to master. In this article, we'll cover the basic rules of blackjack, the best strategies for playing the game, and some tips for winning at blackjack.

Basic Rules: Blackjack is played with a standard 52-card deck. The objective of the game is to get a hand total as close to 21 as possible without going over. A hand is dealt to each player and the dealer. The dealer's hand is dealt face down, while the players' hands are dealt face up. The dealer's first card is always dealt face down. The dealer must stand on a hand of 17 or higher, and must draw on a hand of 16 or lower. The dealer must also stand on a hand of 10 or higher if the player has a hand of 10 or higher.

Best Strategies: There are several strategies that can help you win at blackjack. One strategy is to count cards. This involves keeping track of the cards that have been dealt, and using that information to make better decisions about what cards to play. Another strategy is to use a strategy chart, which provides a recommended action for every possible hand combination.

Tips for Winning: To win at blackjack, you need to understand the basic rules and strategies, and you need to practice. You should also try to avoid playing in situations where you are at a disadvantage. For example, you should avoid playing in situations where the dealer has a hand of 10 or higher, and you should avoid playing in situations where the dealer has a hand of 17 or higher.

BLACK DEALER

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By M. G. Bremner-Boone

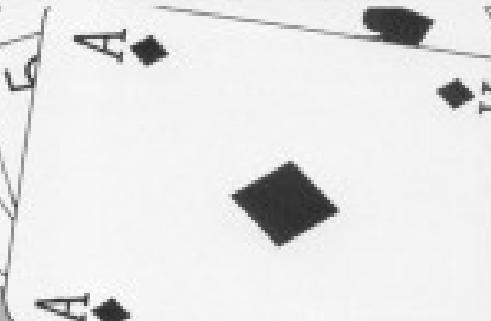
Take your self as it is given to you! Do what the human soul, and when it is the divine essence, can do in order to glorify and reward itself. Be fully content with this creature; let it not grieve you, and never vex you, nor let it vex others. Try to make yourself contented, as no place will do you more service than the quietness of your own soul. Give up all outward things. Then you will find that you have lost nothing, but have gained much.

...and the following day he was
seen at the station, and he
had a long talk with the
station master.

THE BOSTONIAN, NOVEMBER 17, 1841.

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- 二十一

Many other new countries to become member states

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Figure 1

ANSWER

— 10 —

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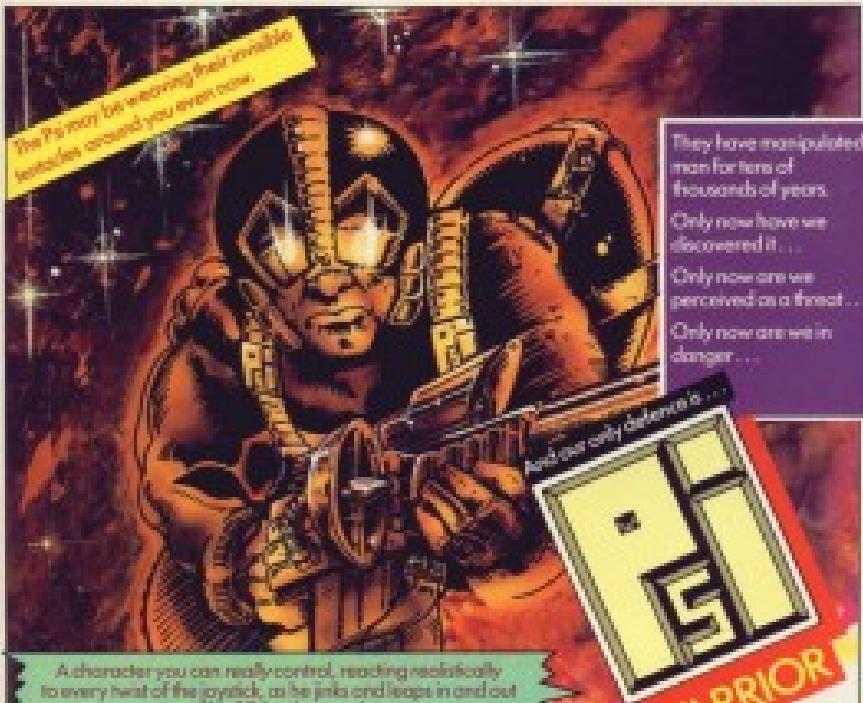
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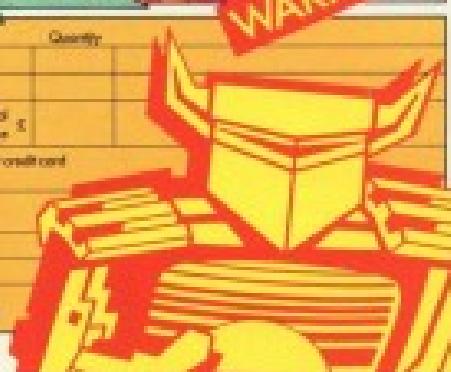
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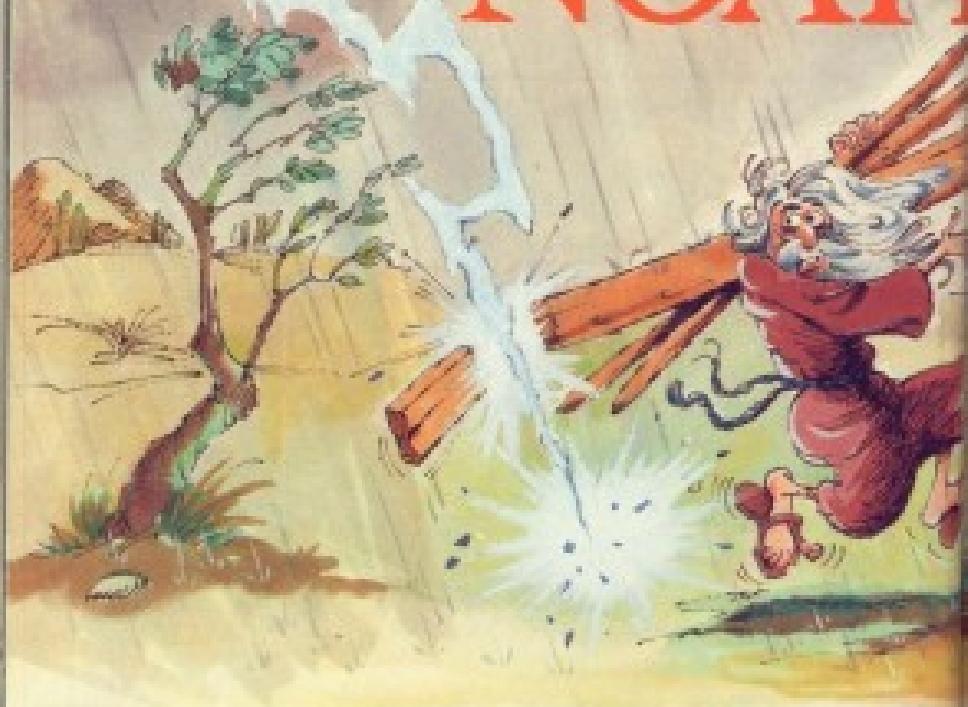
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NOAH



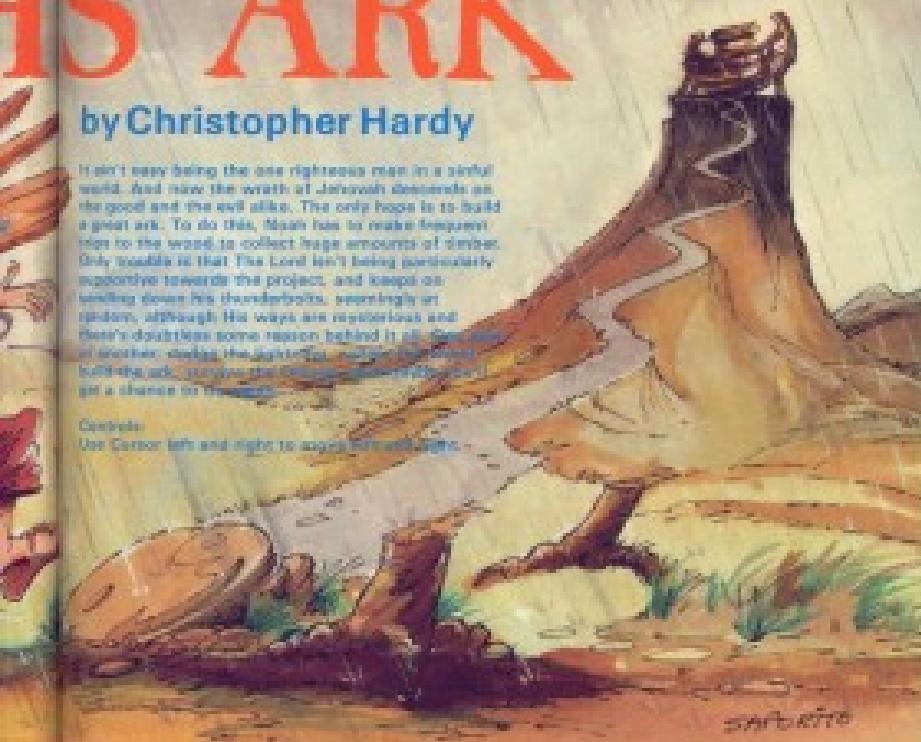
HSARK

by Christopher Hardy

isn't easy being the one righteous man in a sinful world. And now the wrath of Jehovah descends on us good and the evil alike. The only hope is to build a great ark. To do this, Noah has to make frequent trips to the woods to collect huge amounts of timber. Only trouble is that The Lord isn't being particularly responsive towards the project, and keeps on sending down His thunderbolts, seemingly at random, although His ways are mysterious and there's doubtless some reason behind it all. So another reader makes the journey to the Ark with the ark, to give the Ark a hand, and to get a chance to live.

1

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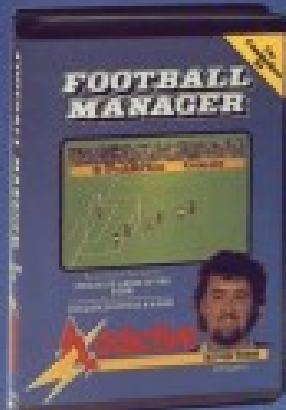


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The *Fourth Protocol* is best-selling thriller-writer FREDDY FORSYTH's newest international hit. Now his devious and tense world of spies, counter-spies and briefcase-sized portable nuclear weapons has gone all pixeloid. RICKY KOLINA reports...

THE AMERICAN market has discovered yet another British fiction in which it's at last possible. Jim Corbett — ordinary types instead from Frederick Forsyth's very English and distinguished writing stable.

The essential element of any computer game is an idea. Manufacturers that publish had used before thinking — and get one. They decided to create software from their existing titles. Of those many fiction authors T.F. was the most obvious choice, suggested Jim. But note that, from the evolution stages of suspense and writing to refine the idea he saw it as a nice project for his wife, and got her to work on it. "Even this meant that 'T.F.' is noncopyrightable," says Jim. "But the children are so far my real assets."

He entered a game-fiction option would mean that of the book," writes author Frederick Forsyth. "Doubtless M&E Doing You It must appeal to all ages, and require logical thinking rather than chance. We didn't want it to contain lots of violence, or to interest only the electronically inclined."

Manufacturing plants for *The Fourth Protocol* will be set up just like the Commandos and Minnows with the Americans invited to visit. For those able to travel, obviously, there'll be a pleasure that they can look out windows like "The Wall" as they move to them.

From this first混沌 about that possibility of a game based on a Forsyth novel, "Our first priority was to find one person who could oversee the design," he says he found him.

John Lambeth and Gordon Parsons are Systems Design Biologists. They are right people, and other factors being the same kinds of people. John and Gordon are both British and Gordon is a graduate of Cambridge University. After discussing their mutual

interests, they designed several board and role-playing games together. Their first commercial project was *Loyalty*, from Century. Our *Fourth Protocol* was started in September, the first draft just having been given 10% approval.

But how did they even begin to translate FF's great 50-page page into a game? "We didn't want simply to translate the book into a game. If we'd stuck entirely to FF's story, there'd have been no surprises. We've created the same basic plot and atmosphere, but situations will be different."

"How was it structured?" "Basically, long periods of intellectual activity interspersed with short periods of violence. We've divided the game into three parts — and three levels, roughly: 'Read the Treaty,' 'Find the Bomb' and 'Avocate Action.' The first section uses John Pearce of the Civil Service, trying to find a key level lead."

The John Pearce in this house is a bit of an odd duck: dimwitted, dim-witted, he's a maximum security agent or member of the Magic Circle. Can they expect to succeed in the game?

"Oh yes. We've tried to simulate the incomprehensible world of MI6 as much as possible. Your quest will be dictated by your supervisor and there's a passage where

an assassin has made a right turn. John will have certain pre-set tasks which will accumulate on a scoring system. — 100,000 maybe? You'll have plenty time to take this task each five-minute time measure in real time. Again, the book won't help you, as we've decided on a certain route."

"You'll be able to use the computer — or, as a companion. That is, MI6's Central. I'm not going to computer. You can play alone and make telephone calls."

The next lead, or *Read the Treaty* is a special game. You move from screen to screen looking for a book companion and picking up clues. The parallel book section begins, meeting a man's help with with

FREDERICK FORSYTH THE FOURTH PROTOCOL



Pearce is being given a "fictitious" promotion to a less efficient position in Paris and disappears. Meanwhile, MI6's top member, Sir Julian Head, is investigating an MI6 agent, the composite parts of which are being assembled in the basement. And there's the secret documents. You have

the use of intelligence services, including the Weathermen, and various agents. Perhaps (though it's not in the novel) "Chemistry" is able to synthesize chemicals directly with Master Blaster using a series of time-pads."

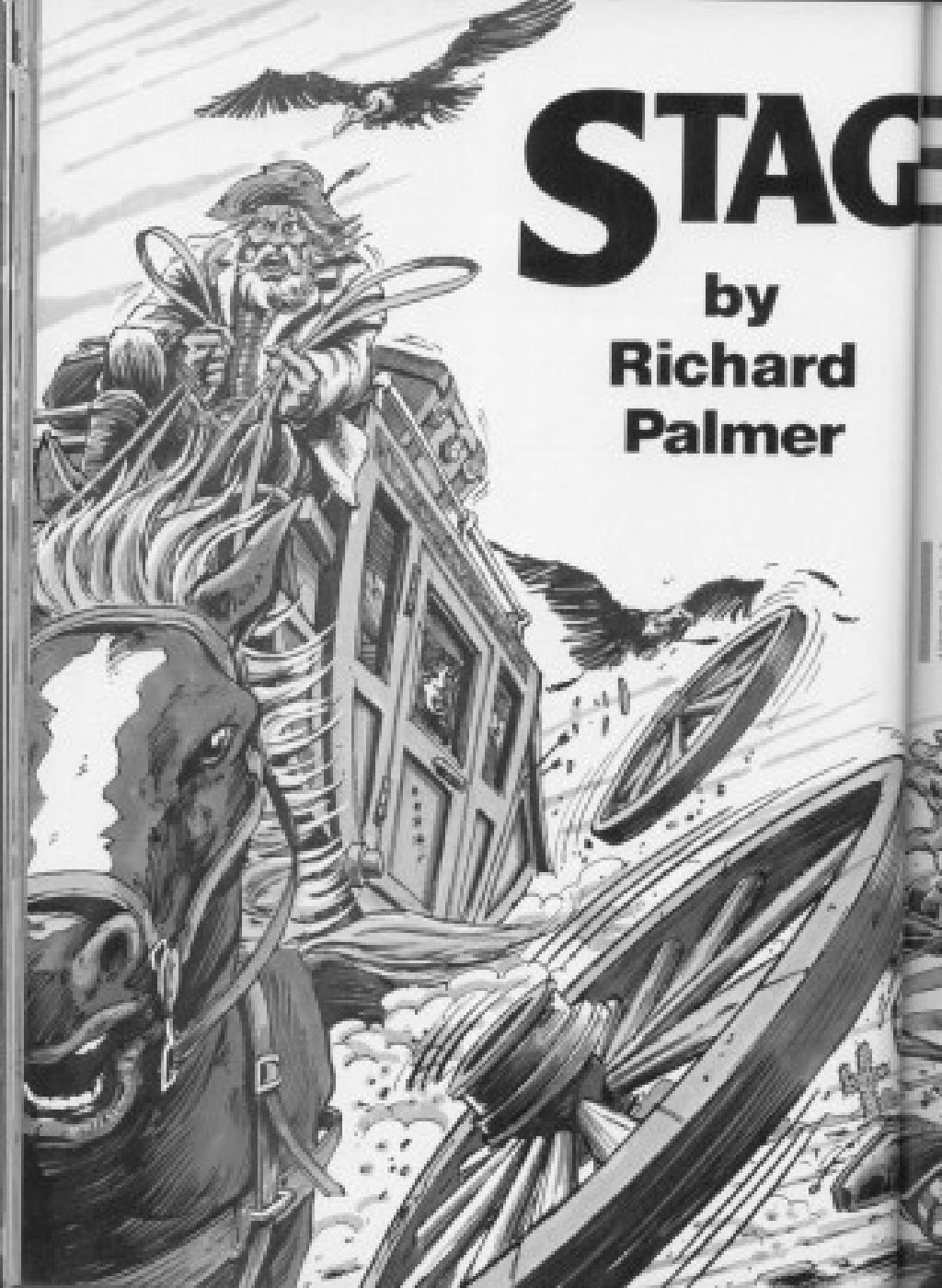
Our team have used FF's ideas to their advantage. Every odd stage of *The Fourth Protocol* will have a codebreaker option. This will be implemented so that it is virtually impossible to photocopy. "We're making this harder for pirates," explains John.

By the time you've made it to the final section, you'll have beaten Chemisty with the bomb. You then will have given you the option you need to diffuse it. But the bomb is guarded by Lieutenant Blasius, and you're working against the clock. Using the SAS Regiment, you must clear the fortress. There's no fire arms, full-blooded assault edition. It seems that each gun has been powdered in order to make the launcher search-proof!

Apparently, our biggest problem has been trying to avoid having a D motion flagged on the game as soon as it comes out. Both of us have ended checking the intelligent summaries and have come across certain information that we just can't use — like the real names of intelligence Headquarters. There are quite a lot of characters involved in the fiction — so we have to be careful.

"When all we see Civil Services, you know, just not don't want to tell us the Falklands?"





STAGE

by
**Richard
Palmer**

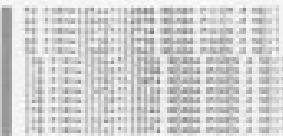
ECOCOACH

Pesky buzzards! As if it ain't bad enough coping with a wrecked stagecoach, this here winged varmint's hangin' around lookin' to dine on cowboy meat. If they'd only build those coaches like they used to, but no sirree, the Deadwood Stage is a rolling around every which way. So catch them wheels, says the trail boss, but don't let them run you over, and above all watch that buzzard.

Controls

Use joystick to move right and left. Fire button to jump when moving.

1. *Любовь и вино*
2. *Любовь и вино*
3. *Любовь и вино*
4. *Любовь и вино*
5. *Любовь и вино*
6. *Любовь и вино*
7. *Любовь и вино*
8. *Любовь и вино*
9. *Любовь и вино*
10. *Любовь и вино*





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If you program games for just 1 or a bit of them does), doesn't Point 2 of Fletcher's other table have enough with

However, it will be implemented. The most problematical problem has been that students discussing anything can seem simple — and even results as remarkable as nuclear fission. Mrs. Spivack said, "One of the most encouraging programs I've seen this year."

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SLALOM SLOPES

from Stephen Geddes

Well, you've just left the beginner's slopes, and now you fancy yourself as a skier, huh? You'll soon find out that you've got a lot to learn. Work your way through the three levels of Slalom Slopes, and you might just have a chance in the Winter Olympic Games. (Don't overdo it — it can be tedious having your keyboard hand in a cast.)

Controls:

Z Left
Z Right

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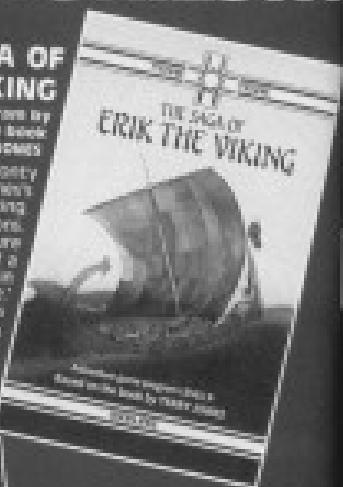
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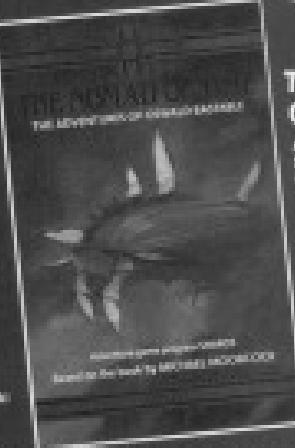
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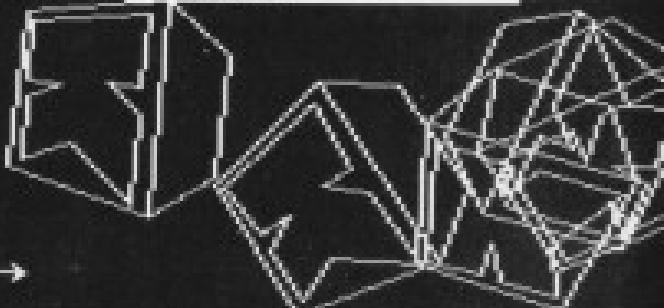
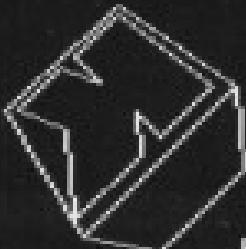
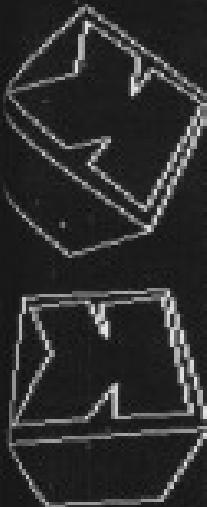
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HOW TO SELECT AND ERECT A VECTOR VOTER

KIM ALDIS ponders the arcane secrets of the Third Dimension



A SHORT 100-MILE-long highway connects Atlanta, Georgia, and Birmingham, Alabama. On the return trip, the last 10 miles of which were between Birmingham and the state of Mississippi, the idea of politics first entered my brain. (But this doesn't really depend on the metaphysics of vector objects), which had been around, making portentous, on computers since the world was flat, so the beginning theory need only mention photons.

In mathematical terms a photon is defined as a dimension and a length, sort of like time and space. There's no component property that caused the idea to grow; it's a starting position and stuck a lot along it. The great beauty of this is that it's very easy to implement by subtracting, adding, multiplying, taking, or creating, shifting and shrinking.

Already we've had three things in three dimensions and although it's done on a checkered cube, it makes it easy enough, that we're going to take some of Definition 10 back.

First of all, to make the simple unit of a vector three-dimensional, it and its

length $\sqrt{x^2 + y^2 + z^2}$ become

lengths that range, x_1 through x_n , along three to a point (x_1, x_2, \dots) .

$x_1 = 3x + 8$	$x_2 = 0$
$x_3 = \text{distance}$	
$x_4 = \text{length} = 10.8$	
$x_5 = \sqrt{x_1^2 + x_2^2 + x_3^2 + x_4^2} = \sqrt{9x^2 + 64 + x^2 + 100} = \sqrt{10x^2 + 164}$	
$x_6 = \sqrt{x_1^2 + x_2^2 + x_3^2 + x_4^2 + x_5^2} = \sqrt{10x^2 + 164 + 108.9} = \sqrt{21x^2 + 272.9}$	
$x_7 = \sqrt{x_1^2 + x_2^2 + x_3^2 + x_4^2 + x_5^2 + x_6^2} = \sqrt{10x^2 + 164 + 108.9 + 21x^2 + 272.9} = \sqrt{31x^2 + 545.8}$	
$x_8 = \sqrt{x_1^2 + x_2^2 + x_3^2 + x_4^2 + x_5^2 + x_6^2 + x_7^2} = \sqrt{10x^2 + 164 + 108.9 + 21x^2 + 272.9 + 31x^2 + 545.8} = \sqrt{62x^2 + 1087.7}$	
$x_9 = \sqrt{x_1^2 + x_2^2 + x_3^2 + x_4^2 + x_5^2 + x_6^2 + x_7^2 + x_8^2} = \sqrt{10x^2 + 164 + 108.9 + 21x^2 + 272.9 + 31x^2 + 545.8 + 62x^2 + 1087.7} = \sqrt{124x^2 + 2006.5}$	
$x_{10} = \sqrt{x_1^2 + x_2^2 + x_3^2 + x_4^2 + x_5^2 + x_6^2 + x_7^2 + x_8^2 + x_9^2} = \sqrt{10x^2 + 164 + 108.9 + 21x^2 + 272.9 + 31x^2 + 545.8 + 62x^2 + 1087.7 + 124x^2 + 2006.5} = \sqrt{200x^2 + 3307.9}$	

Shoving it off in a bucket and shaking it about a bit gives —

$$x_1 = 3x + 8 \quad x_2 = 0 \\ x_3 = \text{distance} = \sqrt{10x^2 + 164}$$

$x_4 = \sqrt{x_1^2 + x_2^2 + x_3^2} = \sqrt{10x^2 + 164}$

From there, imagine a box defining inside them, a volume of space. If you want to know if all are held in the box, you simply add up each dimension in turn to the center it will contain, and then calculate. If there are floors, the process is simply repeated.

The above equations are only held in simple situations like this, but when we were getting into more complex forms, summing up can end up with numbers flying around. This causes us a problem. This is where "Dimension" comes in handy. Dimension is a very powerful method of manipulating points in multidimensional space. As the moment, we're only concerned with three dimensions, even with these, but using these very safe devices

you can insert objects in space with any number of dimensions. If, now, thoughts like three-dimensional were confined to each model that thinks again, you can play with them on screen, if inside which you can do a cool hold-color your results.

Expressed in research form, the above equations look like this:

$$\begin{aligned} x_1 &= \text{Palm}_X, Y_1 = \text{ICB}_X \text{ (volume)} \\ &\dots \text{ Palm}_Y \text{ (volume)} \end{aligned}$$

which looks fairly mysterious but computing it with the equations for X_1 and Y_1 above, it's fairly easy to see the general case —

$$\begin{aligned} X_1 &= \text{Palm}_X, M_X \\ Y_1 &= \text{Palm}_Y, M_Y \end{aligned}$$

$$\begin{aligned} X_2 &= \text{Palm}_X, M_X \\ Y_2 &= \text{Palm}_Y, M_Y \end{aligned}$$

Having sorted that, we can consider just three possibilities:
"Sister" they have the same size, or words to that effect, the left-right, and it's one of the easiest tells, then we're very much obliged to incorporate to another field record. The other is that have that may be "less" "Dimension," in certain respects several, also, less "Dimension" suggests an even greater means of summation. In this very simple demonstration can be performed at once.

Many like easier condition we can start to these about other transformations. Rotating, stretching and shearing. Chapter 1 gives a list of the methods for these operations.

OVER PAGE

HOW TO SELECT AND

Stage 11
 Variation: Block-based
 Behavior:
 (With clockwise)
 (C000)Initial - B00Initial
 (C000)Final - B00Final
 1 - B00Initial, C000Initial
 2 - B00Initial, C000Initial

22
 Setting
 18.00
 18.00

(3) Reflection is added

1.00

0.0 - 1.0

Reflection by added

1 - 1.00

0.0 - 1.0

	X direction	Y direction
1.0	11.8	11.8
0.0070	10.94	10.94

Note all the result is a rotation to position all those axes. They are different because this rotate **displacement**. It's obvious that same here was used a longer while computing distance between objects. That's why it's later before the operation is performed and use a longer procedure for the object **displacement** (P000Displacement in program). Each procedure, for rotation, scaling, etc., uses all the axes with its respect and then call **P000Displacement** as parameter. This "keeps" a simple and easy to keep code on.

This is all very well but you're probably thinking, in program there is no collision detection between the objects and the operating rotation body from the rotation of the

The same or type of scaling, the distance from the origin is scaled as well, and the net result is a shift, since it's probably not needed. Displacement is required to do a rotation above a power on the defining point. Simply, sum each step point to the origin and all the other points on the defining by the same amount, do pose rotation and when will be back to where it was.

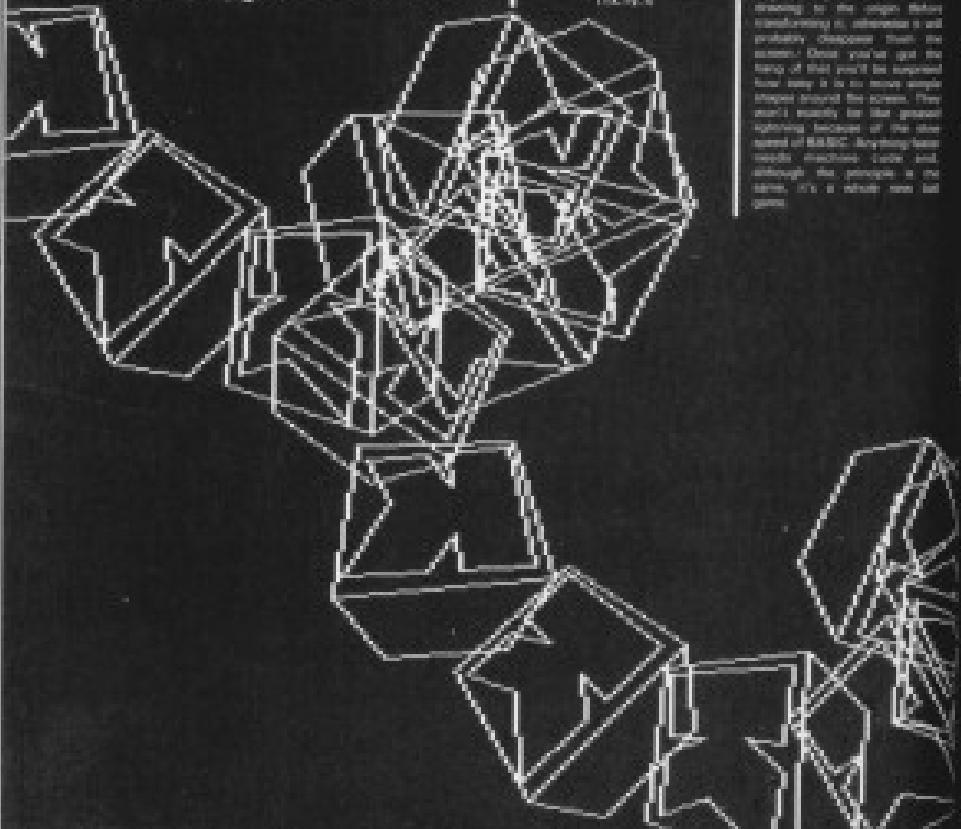
Problem is, isn't it? As you have a shift rotation. This means that tries to carry single, the coordinate system won't using own axis. An system which can, though, is a homogeneous coordinate system, in which the point itself becomes (1.0/0.0/0.0). For most purposes we can use 1.0/0.0/0.0 a lot of additional division. This, however, is often many more iterations.

11.80
 00.00
 18.00

and all the previous steps can be exactly the same as in RayCast except they have an extra loop and volume, all over because the bodies might needs to lists. For example, instead RayCast when becomes ...

C000Initial - B00Initial
 B00Final, C000Final, A
 10

Now go ahead and try it out. Programming, please accepts a series of values from the keyboard and performs a transformation according to user the VRML statement, so you can move coordinates like C000Initial or translation and orientation. Imagine! Start off doing plain ops and then try to link rotation and reflection. This one will be addressed to all give the same rotation of 90 degrees the same for you don't change that, rather than the original. Transformation to add the reflecting to the origin didn't transforming it, reflection is all probably disappears from the scene. Once you've got the hang of that, you'll be surprised how easy it is to move irregular shapes around the screen. Then just it's mostly like the greatest software because of the lots of features of the VRML. There are many more possibilities, though, but through the program is the same, it's a rather new game.



D ERECTA **KECTOR**

To date, Atari's most astonishing game is Pole Position... If you are only going to buy one game, then this is the one you should get.

COMPUTER & VIDEO GAMES

...Pole Position gives a very strong sense of speed as you hurtle round the track. The super-realism of the three-dimensional effect adds a lot to the game. It is a great graphics demo.

PRACTICAL COMPUTING

Brilliant!

WHICH MICROWORLD SOFTWARE REVIEW

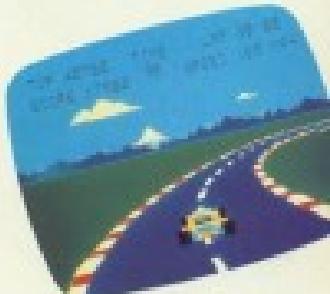
...a terrific version of the arcade motor racing game...graphics are superb...sound, too is very good as brakes screech and engines rev-up.

PERSONAL COMPUTER GAMES

Exciting, exhilarating, excellent, Pole Position takes the lead as the best Atari race game around.

PERSONAL COMPUTER NEWS

What can we say?



We're overwhelmed. Though we should just add that with AtariSoft, you can now play "Pole Position" on the Commodore 64, BBC and Spectrum computers, as well as on all Amstrad[®] systems. And you'll also find available other games such as Galaxian[®], Robotron[®], Moon Patrol[®] and Ms. Pacman.

Amstrad is a registered trademark of Amstrad PLC. All other brand names and product names are trademarks or service marks of their respective owners.

IN THE NAME

*OK Kid, up against the wall
and spread 'em while we read
you your rights. Don't know
your rights? Toh, toh, kid,
you've got trouble comin' . . .*

By JOHN



OF THE LAW

IN QUEST



COMPUTER CONSUMPTION

ARTICLE 17 OF THE Computer Consumers Protection Act, 1986, is as follows: "If you buy a computer, peripheral or software for use, either for direct processing, book keeping, or accounting purposes... whether you intend to fit it into your business or not, there is a legal contract with the seller, with the law very much on your side."

For your part, you agree to pay the asking price, while the seller agrees, under the 20th of October 1976, that the goods are fit for their usual use, free of urgent qualities and are as described. Moreover, under the Maharashtra Consumer Act 1965, anything he tells you about them has to be true.

OK, say you walk into a shop and see this notice hanging prominently with a sign saying: "The new computer Puhani PC-1000 will never break". You ask the salesman if there are spare parts available for it and, when he says there are, put your hard-earned rupees at the counter and walk out with your newfound love of electronic necessity.

ERRATIC

You get home, plug it in and nothing happens. Or happens erratically, or fails to start in its Japanese or otherwise flight, the thing has broken in transit, or it's a computer in component to non-goods and when you look around, the situation, whatever caused it, all too often it's you. Worse still is, there's "an implied condition" that the goods are reasonably fit for their purpose". Reasonable means that you can't expect a much computing power as a VHS-C is an 8880, but if you want the power which you wanted from a machine and the one they sell you doesn't do what you want, then again it's very reasonable fit.

If it works, though, but is unreliable, broken or otherwise wholly when you get it there, or the following day, coming off the tree in the first week or anything like that, you'll expect the manufacturer (that is annoying), then your second problem has been created, the "implied condition" that the goods supplied are of "merchantable quality". Reasonable doesn't apply, "as regards defects specifically brought to the buyer's attention" or "if the buyer

examines the goods" or requests certain points and examination ought to reveal".

Sometimes these processes will overlap, like the image of a machine is full of viruses destroying them. If you had a business that you wouldn't be able to sell but it's currently valuable in case of "merchantable quality". On the other hand, it probably wouldn't worth the cost either.

If a shop salesman describes something, or it carries a sign or later, there is "an implied condition" that the goods will correspond to such description", in other words, goods must be what they say they are.

Again, from a supplier's standpoint, sales talk need be fruitful. If you demand to buy something is influenced by information given you by the shop, that turns out to be incorrect then it's better the representative. This applies if the shop acted dishonestly and to the best of their knowledge, it caused the dealer's sales opinions, complete statements of purported fact.

So, here you are with your supplier, which doesn't work, is failing down, has more stored and for which there are zero gains apparently. When do you do these? Not easy — you have to strength back and complain.

Their first advantage is that the legal definition of consumer is not that you've just taken the goods out of the shop. But note, too, that advertisement in itself is not enough to clear that you accept the goods as merchantable, whatever that means, or how good that is a reasonable price, otherwise that creates an implied, if not only, the reason you're in court, the better.

But, if they are "excepted" the goods, i.e., you're not returning within hours or days, then the shop must refund your money in full. It fails, however, later, within months, or even, then you'll probably have to accept damages. In real life cases shops will either exchange faulty or unsatisfactory goods or give you credit, but neither of these remedies, even though they may be perfectly satisfactory in both parties, is acknowledged in law. The law does reward or damages, nothing else.

"Damages" are normally taken to mean the loss of profit, but the shop is in fact liable for any related

OVER PAGE

loss of expenses. Buy some software parts wiped out when a machine crashes, or your tally gets blown up for anything less directly related to a defect in the machine, then the shop, being in breach of contract, must make good. Moreover — admitting that few people realize — you're entitled to claim for inconvenience. So the shop is liable for your time, transport, and trouble. Only, remember, there's no guarantee that the shop has to pay the cost of inconvenience. But this has no significance here.

If the shop tries to walk-off your Farnell complaint, your next step is to put it in writing, addressed to the highest management level. If you still can't get any redress, then add other written accusations that the shop belongs to and go to them.

Last, draw up a Small Claims court (SC) form and explain what you have they used. In The Convenient Store, the Law 1. The important things to remember are that even if you know you don't have to pay costs, and the advice they have been made is acceptable and fit it yourself as possible, as it wouldn't cost you a penny out of pocket from the claiming exercise it might prevent.

DEMONSTRATION

There are, however, some simple pre-emptive procedures. First, do not assume as you know exactly what you want and why. Take a friend with you — an expert advised I bought one of these and an engineer later. Make the shop set up the computer you're actually going to buy, not just the demonstration model, and show that it's doing things it's supposed to do. Ask the shop, and tell me, they won't need the argument above.

If you still run into problems, remember that whatever we've said up to this point, we don't let the shop off, if they lie and refer you to the manufacturer. We can see your contract is with them, but they have to honour it. One important point though: the manufacturer is only after the original purchaser, so if you've given a machine to your son and he sold it to another, he can't get your manufacturer to deal with the shop in order to implement his rights, according to the manufacturer.

However, under the Supply of Goods (Warranty) Terms Act 1973, there is a general exemption with

machines. The general rule seems to never fit in a computer and keep this in your mind instead. Despite Article 12(1), which guarantees that only be affected by stated rather than other or implied "use" (see Conditions of Sale Part 2, para 26 day 1), there is also nothing requiring you to do so. Though most may accept this, the manufacturer does not affect the purchaser's statutory rights, and it is in fact a common defence against the Merchandise Act 1972 to try and limit such rights, by arguing that you accepted the manufacturer's conditions, rendering it fit of legal ground. While you have nothing at all to do with it.

Most guarantee providers or rental or repair contracts specifically mention the 12 months of your right through license only give you this. This sounds very nice of them, but alas, it's owing to the manufacturer to decide when his legal holding ends. The question is could such a computer be reasonably expected to last 12 months? Obviously, Computer-aided design (CAD) worth guarantees often say that the 12 months gives "three complete years of reliable use". To me "reliable" is at least three and probably more, and a system would almost certainly take the same view. Obviously the more you pay the more you can expect and a BBC, for instance, can reasonably be expected to last longer than an Amstrad, but both should hold up the longer than an Amstrad.

Guarantees like, an Dell, Acer and Compaq's, state of imply that liability is limited to the initial failure, but this isn't so. The manufacturer holds for most damages and as a rule as. When both parts and relationships are on sale general to when they change machines that have been shipped, modified, released or otherwise removed. Look Hawley's best story of a manufacturer who wouldn't, a Sodickem, as a customer had nothing in, so could, collect from under warranty, and then complained that the machine didn't work.

When a customer goes to the supplier, whether it's a dealer shop, the original dealer or the manufacturer, there's another contract, apart from their purchase. These are both straightforward. The much will be carried over to a reasonable standard. The guarantee card will be of good quality and reasonably fit for use, and the word will be shown as agreed.

The final is a bit weaker — that the customer will receive "reasonable care" of most goods. According to various liability law, this means nothing "good left" of customer's old, and an offence under the British Contracts Act. The only guarantee I've seen that does a better is to

say "to a customer, which makes clear the customer does not accept responsibility for the loss or damage during transit or in the course of the Company". (GPO makes note, the fact of the matter is that if you hold over a bad machine, you can legally expect to hold a faulty functioning unit returned to you. Since it's out of your hands, leave it to the supplier). It's the supplier's responsibility, except in the event of his being able to prove that he was not negligent.

Let's pin this down now that we have a lot of rights that nobody, but nobody, is going to tell you about. While some shops will have no liability at all — partly others, nothing but. And the same with manufacturers. What the user can do is hope that they'll give up and let him get away with it. Hope, but in truth, you enough to know how to fight back.

COPYRIGHT

UNLESS THIS is the very first computer mag you've ever read, you'll know that software publishers do a lot of writing about "unauthorised reproduction". In plain language, that's now estimated to cost the industry £10-12 million a year.

They invest plenty of time and money in developing programs and their efforts are, in theory, protected by the Copyright Act 1988 and the Uniform Copyright Convention, which most countries have signed.

Copyright covers any original work, "literary" or "artistic" (or both) into which the author has invested. Purely technical, scientific, craft or judgemental, clearly no differentiation is from the existing work.



The Act forbids the reproduction, publication or adaptation of such work by any unauthorised person. Even though software is not specifically mentioned in the statutes, there is probably no doubt that the implied protection does exist, for it has been increasingly used in the courts. The only area of doubt is whether rights and royalties are covered by copyright or patent law.

No registration is necessary; all you have to do is deposit a recording, book, comment in a paper, tape or disc, per £100 (100gsm paper) or £100 (any print). You can also start carrying out process. Unless you work for a software pub-

isher that is likely to insist on the course of employment under a contract of service, written or implied, necessary damages in that amount. However, because of the vagueness of copyright and depend on the conditions of employment as there are plenty of agreements between publishers and employees and some specialised breeders. Publishers usually retain copyright, but even that depends on the nature and wording of the user's contract. Programmers have their own professional body, the Society of Authors & Illustrators, Composers (Music, Books, Design, Stage, Radio, Television), which helps to thrash out the problems involved in contracts and copy rights.

The classic advantage game, Authors, musicians, and Composers' fees, have never been copyrighted and this is what is called the Public Domain. This means that anybody can copy, publish or adapt it, but nobody can gain any legal rights over their version which sits in line with original published or adapted. However, the TV broadcast licences, which Law 8 added to their implementation, Composers' Association, is already a sort of licence, will and judgment and thus copy right. So theoretically you're free to copy the first two rights of it unless only certain more stringent, but not the last two.

BOOTLEGGING

There are three different forms of piracy - individual, organised and bootlegging. If you're in, God forbid, should make a copy of a program and sell it, it's a breach of copyright and an offence being to copy a file off the tape or disc from a record. But on this level it's really an ethical or moral question - have not personally had your stamping pulled off - because, let's face it, there isn't much anybody can do about it. But the "software is pirated" argument, isn't used through adequately. It's a process used to be a threat to manufacturers of products. The truth is that an awful lot of games and utilities are literally worthless (over £100 for a start) while others, particularly documents, are very susceptible for what you get. Ideally stuff software shouldn't be published, but you avoid paying over the odds by using legitimate.

Software houses use many illegal copy in a host site, which probably describes the case mentioned, as it makes profit without a lot of effort. To be effective combating it would never dream of bombing or robbing sites, but they also make paid copyright

claims. Take a typical and example: "Unauthorized copy, selling, hiring, lending or sale and reproduction prohibited". A lot of this is just hot air, because often you've paid your money, nothing else is in your pocket and if you want to hire, lend or sell it, that's their privilege and the manufacturers can take a walk.

COPYRIGHT

Programs is the one that really causes the bad blood in the lot. This is when one is infected. It's not a single author's problem and makes it a little different. Though actually not very different since later development costs equal big profits. This sharp practice is pretty widespread in our country from the number of盗版 programs around, and less resistance on the part of, (Sony, Kenny Rogers, Michael Jackson), or whatever. These have been several successful civil processes for infringement of copyright, but the problem is always phrased that one property is another's liability. Identified as such, that "copyright" is an offy word which brings in drivers to shooting, though more and more and its more obvious has a good chance of breaking the rag.

The real issue is legitimate mass media publications or other people's products, clearly games, and it's in this area that software publishers seem to see changes in the law. While Part I of the Copyright Act, the code in, works like, part 2, the criminal sections doesn't. This last addition, presumably brought by Crystal Software (see Design, Design system Corporation (Software), and the defendants being fined up to \$50,000, as Crystal estimated that software costs (400,000) the result was in this view is not inconsequential. Moreover, Crystal seems to want to establish that software piracy was a criminal offence, however, having said, they stuck to clearing infringement of the media, (Sony, E.T. etc.). In practice, not covered in areas that wouldn't have worked.

EVIDENCE

Microsoft, seems to have taken a clear-cut position on bootleggers. In the January, have announced obtaining what's called an Action Pillar which applied a bootlegging operation in California. This is the first of its kind in that evidence of the illegal crime can be seized by the police before the accused gain control of the impending selling and destroy it. Tapes, what tapes? But they

will have to deal with the shortcomings of the law.

PART II, the Protection Against Software Theft, has clarified a bill that amends the Copyright Act so that it specifically covers software and provides the police with greater powers, and the courts with much stiffer penalties up to \$100,000 fines and/or two years imprisonment. A bill has amendment were made in 1982 in other cities. Seattle, Michigan, New York, Massachusetts, and Boston. The 10 Minutes Rule in July, the government has more on the process to support such a Bill, but it will take a long time before it becomes law, no doubt when.

FAPI's bigger problem is that a lot of pirate versions are not good that they can't be told from the originals. So, in order to fix the public to the code to reflect the proposed changes in the law, software houses will have to come up with some way of branding their original in order that the pirates can't copy. Different pricing itself will be the ultimate answer.

ROTTLED SOFTWARE

There is now few users left with the most glaring example of software piracy, the Japanese company that is rapidly selling and even advertising bootleg software. There doesn't seem to be anything the massive British victims can do about it. The law is on their side, but international litigation could be slow, expensive and uncertain. All Vastus has to do is open things out as long as possible. On a regular basis, Vastus sets up at a different name and pseudonym each others they started.

The answer to piracy seems to lie not so much in the application of the law, even generalized enough, that might help against the general in the development of built-in security codes or anti-copy discipline throughout that will place it impossible to copy programs, moreover, gives the ultimate value of computer science. Vastus' sister and that dual dot American company recently produced a program called Locksmith which would copy any supposedly protected software. The only thing it couldn't copy was Locksmith itself. You guessed it - another company promptly came up with a program that could in theory an anti-breakout security device already exists, Jim Lamarr's famous program which the government uses in a threat to national security and have built up.

WANNA WIN A FIVER?

Yes, you too can join the formidable team of inventors assembled on this here double page spread and end up RICHER by FIVE WHOLE POUNDS! If we publish your letter, that is.

Send your scenario to...

Letterbase,

Big K,

Beam 2000,

IPC Magazines Ltd,
King's Beach Tower,
Stamford Street,
London SE1 9LS.



A man plays chess with an animal enclosure for a BBC radio station.

DOPPELGANGER

I have written the review of *Aliens: Aliens vs. Predator* and I would like to become a regular reviewer for *Communication* All games.

LEE STURRS,
Cavendish Vale, Birmingham

I have written the review of *Alien: Aliens vs. Predator* and I would like to become a regular reviewer for

Communication All games.
B70 0QD
Gleno Vale, Birmingham

It is an incredible shame of planaria, greyish oligochaet worms - both appearance live in the same habitat, however, and both have segmented intestinal systems of Motor Mania. Truly, the theories of science keep reverting

BIG KRYPTIC

Something has been slopping at from down under. What is the official definition of 'hacker' and the numerous other linguistic entities in BIG K? We do know no reference to the meaning they are not necessarily sure. Could you provide a guide to British computer lingo?

Despite my cryptic language, BIG K is the best mag of its kind - and we get 20% off what's available down here. Keep us the banter, mate!

NICHOLAS MURRAY,
Eastbourne,
Sussex

• A hacker is one who破壞。Hacking is performed on a computer via the telephone system and a device called a modem. This enables a hacker to 'break in' (using his equipment and 'key-in') break a checksum and 'talk' (talk) with other hackers. British Hackers, please submit your electronic angst to Giga-regulation.

Meanwhile, mate, I just happen to have a real live Captain Hacker here for your perusal... (P.S. What's Teamz?)

HACKER HAS HUMP

Please unhappy I am that you do not take a more liberal view of hacking and crackers, but write about them instead. I am writing to protest Hackers, from below, attacking. You MUST write more about The Art of Hacking (and crackers).

KENNY MONSTER,
Mangrove

WACKY THIRDBUCKERS

I like B.C. But I retain the idea of 'hacking' because and because over the head. Imagine how bright you would be if the best games are on. Bummer. Let me tell you, Kenyon, that this means lots of information as a reported fact that a car's seat back on.

EDWARD JOHN,
Brentwood, Essex

IDEOLOGUE

You don't like B.C. And you believe you think it's better. J. CLARK
Birmingham

• You've both got hold of the wrong end of the stick - mate, I'm afraid, it's B.C.'s graphics and

action that never fail to captivate you. The difference is not ideological.

BLUNT

Could you please tell me where the Vic and Steve series fit into this?

M. COOK,
Huddersfield
Tyne & Wear

• Ah... Communicate Business... Machine! Above it was an article offering solutions to a management problem. And why bother making different machines mutually incompatible? Such a sense of humour. Yes, the Vic and Steve possibly *shouldn't* be different. The VIC 20 doesn't have抗-aliased graphics as well as the Amstrad, you have to simulate high resolution mode using anti-aliasing techniques. Thus the screen with 320 anti-aliasable characters and then adjust these to give the illusion of resolution. This is not a bad procedure in BASIC and I wonder if I wouldn't further reduce system's loading if I assembled.

On the 64 high resolution programming is step above, but at least there's a true bit mapped screen. This would normally resolve at address \$8000, but due to the VIC 20's memory paging system, you can relocate address memory area. A complete albeit in other words, and far referenced you to get hold of a more technical manual, such as Commodore's Reference Manual. If you really want to dive in deep, i.e. P.B.

OUTRAGE

You've really done it this time. If your editor had any sense, Vodafone would never have been included in Giga-regulation. It's the game of DAVID SMART,
Omagh,
Northern

HOW TO SAVE £££'S ON THE COST OF SOFTWARE AND HARDWARE 'ADD-ONS'



LOGIC 3

Spectrum Club

BRITAIN'S NO.1 SOFTWARE CLUB

LOGIC 3

WINTER ISSUE 1984/85

WIN A MICRODRIVE

Christmas Competition

1st prize: ZX Microdrive 1 (records over £120)
 2nd prize: Cymru's iSpeech
 Runners-up: 20 Speech
 10 runners up: lots of free
 games software (each worth
 over £10)

To celebrate the Christmas season Logic 3 are running a special Christmas competition open to ZX Microdrive and Cymru software subscribers to first and second place.

The ZX Microdrive, complete with 16K RAM, is a outstanding piece of electronic equipment and allows for planning programs and data on graphical screens and modelled. The ZX Microdrive is a highly powerful, featuring an 8080 microprocessor, and over 1000

to enter the competition you will

need to answer the questions on the Card and mail them to us at Logic 3. All entries received before the 1st January will be eligible for the competition. Prizes will be:

1st prize: the first 10 entries

2nd prize: 20 entries

Runners-up: 20 entries

Over 100 entries receive logic 3 software

and more to come.

There's still chance to win these

fantastic prizes - just join

now and enter the competition.

Good luck!



CLUB SUCCESS

The Logic 3 Spectrum Club was launched in July, 1984 and has been an outstanding success. Already more than half-way to its target of 10,000 members in twelve months, the continuing growth of the club has kept Logic 3's staff working hard & week after week to keep up with demand.

Tony Taylor, Logic 3's managing director and co-ordinator of the Club, explains the success as follows: "With other clubs which I personal have joined there is no real reason for the club to purchase a

support for members who buy records. And to purchase a

constant number of products from a short list, our Club is

different. Members have no obligation to purchase any products

from the club or the pressure

is on us to always only

the best quality products and often the best possible price.

We also take a lot of pride

in publishing independent

reviews on all the products

we carry and if we do not like

something about a product

we are not afraid to say so."

Tony Taylor's policy of

offering Club members a

real service rather than just

running "per annum" mail

order business" is returning

new members all the time

but says Tony Taylor is not the

main objective: "as we grow

so we will be able to

improve our service to

members with further and

perhaps, one day, develop

the club catalogue into a

proper magazine." With the

Christmas edition of the

club newsletter now running at

a number 20 pages,

increasing numbers of more

than 100 products that day

are being sent to members every

month, the club is well on the way to becoming a major force in the computer software industry.

BUMPER
20 PAGE ISSUE
COMPUTER COMPETITION

INSIDE

EDUCATION

A selection of the most effective educational programs available. Designed for children from the age of 4 to 16.

GAMES

The best games for the Spectrum selected by our review panel and rated according to graphics, sound, action, originality and more.

PROGRAMMING

The best BASIC packages really show you how to write structured programs in an understand way.

UTILITIES

Create your own games.

300 great tools in fun and games.

...and more.

LOGIC 3'S SOFTWARE PANEL

John Wilkinson, Head of Marketing, and his team behind the most successful software in a shop selling computer software, look back at their year.

Andrew East, Director of Sales & Marketing, on Computer and International Divisional Manager, on International Divisional Product and Marketing Software.

Mike Healey, Product Manager of Business Divisional Business Applications, on the strength of graphics for business.

Tony Turner, Software Marketing Manager, on Customer Applications and 100+ software titles.

Spectrum Club



LOGIC 3

The Logic 3 Spectrum Club has something for everyone: regular reviews, excellent savings on all the latest top quality games and educational software, and discounts on hardware.

NEW MEMBERS INTRODUCTORY OFFER

Join Logic 3 Spectrum Club within 30 days and benefit from our new members introductory offer to purchase our "Software Selections" at a huge discount.

MEMBERSHIP IS ONLY £3.00 PER YEAR

(Standard, ie. Only 25p per month)

TO JOIN FILL IN YOUR NAME AND ADDRESS ON THE ORDER FORM (OR ON A SEPARATE SHEET OF PAPER) AND SEND WITH YOUR £3.00 TO THE ADDRESS BELOW.

NAME: **JOHN TAYLOR** DPT

THE LOGIC 3 SPECTRUM CLUB

MOUNTBATTEN HOUSE

100 NEW BOND STREET

LONDON W1A 2AB

tic Attack

Author: Bill
Genre: Action
Publisher: Interplay



Player: 1/2

Club price: £4.95

Using your mouse, try to 'Tic' the Godless hordes of ACO. You become infected in an evil hospital castle. As you move around, collect the coins, weapons and passages to the next level. Entertainments, Drunks and the Devil himself! You will move from room to room until you've won all the coins and pack up some items which can be used later. A fast moving, graphic-only adventure.

Author: Tim
Genre: 1
Publisher: Interplay
Platform: Amiga

Avalon

Author: Jim
Genre: Adventure
Publisher: Interplay

Platform: Amiga

Player: 1/2 Club price: £3.75

An exciting 3D action adventure. Avalon features 220 rooms on eight levels, and over 100 characters. You control the 'adventure projector' of Merlin. It should reveal hidden video secrets recorded in 100 levels. Your mission is to banish the Lord of Chaos who has kidnapped the princesses from the sleeping castle of Avalon. You will need to use spells and skills which can be found in the rooms of the castle or the Land of Chaos.

The game displays three floors, the bottom floor is a mix of magical objects, and many sets of the 100 other characters. The rooms and levels are always different and at least in 3D. To collect a secret object or to banish the bad guys, Merlin must use a spell, you must provide the knowledge to select the right spell from the spell scroll. Only Merlin spells will project distance against certain enemies.

Avalon is a complete game, and you'll need the imagination. The graphics are excellent and well animated, and the sound is good. Plans to help you succeed and encourage for the final level. An original adventure.

Deus Ex Machina

Author: Tim
Genre: 1
Publisher: Interplay

Player: 1/2 Club price: £3.45

The prospect of an all star cast performing in stores around, synchronised with a computer game and coming from a famous house of media marketing, Automata was pretty impressive. Perhaps that was just coincidence. With a lot of innovative games in such a building, that may be why it's not an improvement to the set up at all. Deus Ex Machina has got out of the first class category, but not yet a full class act. It's still not even included in the 'Gold' package. Excellent Automata is a 'Gold' pick, it's courageous, bold and it's courageous indeed.

I'm sorry the game is property, you've got a nice muscular lookabout who's fit to be as well as your normal specimen. You load the program and play the audio tape, then there's a colourisation routine to enable you to differentiate the characters. The basic theme is the story of life and its struggles. You will sit in a seat in the woods, get used to becoming and staying, growth, form, life and death, all over again. The computer side consists of a number of intricate little games, where you're constantly having to light up the gardens of life, then to the end you've got to stop your blood cells shooting. The audio tape tells this story and more.

It's a good mood of the game though.

The soundtrack would do credit to a Virgin film composer. The computer graphics are average - I'd say it's not much on you can't tell how young they are. Different I have, interesting. If you're a Psychologist?

Author: Tim
Genre: 1
Publisher: Interplay
Platform: Amiga

Dreamweaver: Genesis

Author: Tim
Genre: 1
Publisher: Interplay

Player: 1/2 Club price: £4.95

Another high quality graphic adventure from Paragon. You explore an ancient castle, consisting of no less than 200 bedrooms. Get to the corridor by climbing through the doors, while avoiding the non-magical aliens, who will shoot you if you're not careful. The level of the puzzles is high, but the combination of both level and theme for the adventure are superb. For those who are afraid to go without planning skill, it's not too late to approach them in a more sensible fashion. The 'Gold' package adds about £10 to the price. Good value.

Author: Tim
Genre: 1
Publisher: Interplay

original game of the year entries

Name: 10
Genre: 2
Author: 1
Platform: Amiga

Author: 1
Genre: 1
Platform: Amiga

Jet Set Willy

Author: Tim
Genre: 1
Publisher: Interplay



Player: 1/2 Club edition: £4.95

At last! The long awaited sequel to *Mario Bros.* The new game continues. *Mario Bros.* has gone from stage to stage. Now he's been promoted to a racing game. He's now racing for the first time, but it's not Mario. It's Willy. After a party, before his 'homework', Mario will let him catch not in bed. Check the beach down the road, and on the rooftops.

Jet Set Willy contains exciting graphics and music, and is made this one of the best for the Amiga.

Author: Tim
Genre: 1
Platform: Amiga

Marco Miller

Author: Tim
Genre: 1
Platform: Amiga



Player: 1/2 Club price: £4.95

With the likes from Interplay's *Marco Miller*, it's almost worth the price. The game follows *Mario Bros.* from stage to stage. Only this time, he's not racing, but fighting. He's searching for the last level, but it's not Mario. It's Marco. Marco will let him catch not in bed. Check the beach down the road, and on the rooftops.

Jet Set Willy contains exciting graphics and music, and is made this one of the best for the Amiga.

Author: Tim
Genre: 1
Platform: Amiga

Author: Tim
Genre: 1
Platform: Amiga

Mugay

Author: Tim
Genre: 1
Platform: Amiga



Player: 1/2 Club price: £5.95

Join the inhabitants of the top selling adventure from Interplay - *Mugay*. This game can best be described as a weird and crazy looking platformer.

As *Mugay* you must explore, your surroundings, and solve puzzles. Such as problem sectors and the combination of memory and skill, and most important of all makes sure that your game starts off tops.

Author: Tim
Genre: 1
Platform: Amiga

Author: Tim
Genre: 1
Platform: Amiga

Sabre Wolf

Author: Tim
Genre: 1
Platform: Amiga



Player: 1/2 Club price: £5.95

From the publishers of Spectrum, comes back to the Amiga and *Sabre Wolf*, the latest entry in the *Wolf* series.

The player you control, controls and looks, the main platformer is a bit too simple, maybe something a bit more difficult, but at least it's

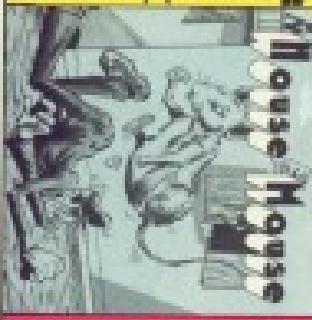


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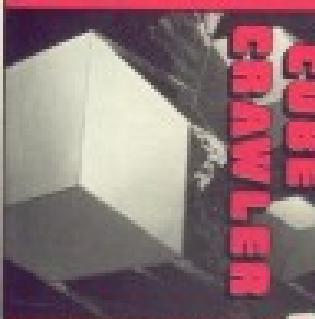
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CUBE CRAWLER

Paint Roller



Paint Roller



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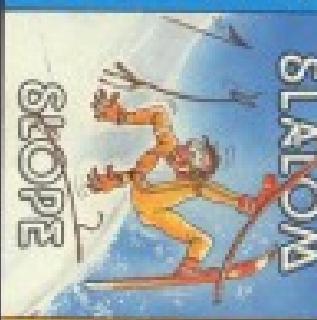
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PROGRAM



SLALOM SLOPES



SLALOM

Rust In Peace



Rust In Peace

for VIC 20

for Atari

for BBC



PROGRAM



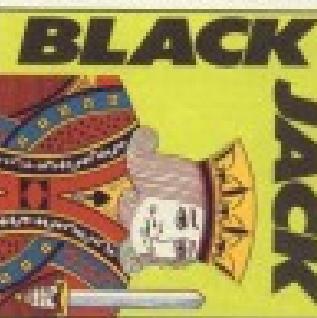
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PROGRAM



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BLACK JACK



INLAY CARDS

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NEXT MONTH

What else
but... **GOATBUSTERS!**

*The (almost) Compleat
JEFF MINTER*

* Yak the Hairy* talks exclusively to BIG K.
Frank, earnest, passionate. Views on
software, style and other subjects starting
with S.

- * The Llamasoft line-up: games featuring funny
creatures, among other strange objects.
- * EXCLUSIVE PREVIEW of Minter's newest
runner — *Maze Llama!*

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The Spectrum listing that unlocks the mega-secrets of
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don't believe it!

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serious and useful things for your 64 to do.

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Adventure with Steve Rector's *Doxter*... shed
tears of nostalgia with *These We Have Loved*... take
a stroll down *Acadia Alley*... revel in our reviews...
lose lilyts through our listings...

All non-human life is here... read it at your own risk.

REMEMBER

— In BIG K no one can hear you scream... .

Paint Ro

by Alan Heywood

Life in the Corridors of Power isn't easy. Someone's got to arrange to do the frequent whitewash jobs that every government needs.

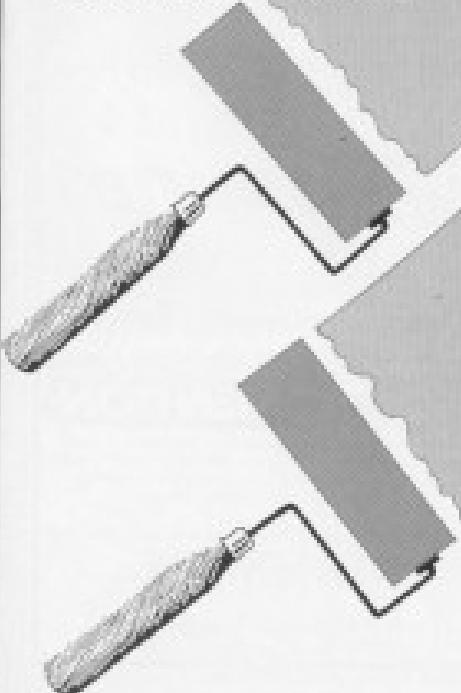
This exciting game, based on authenticated Civil Service leaks, has you struggling to paint every bit of floor space, but beware of your paints running out.

CONTENTS

Left cursor: Go left

Right corner. Go right.

Space bar: Blast through obstruction



First of an engaging --
and odd -- new
BBC B series in which
we profile Great Deed
(or Near-Deed)
Computers of Our
Times... .

THESE WE HAVE **LOVED**

No. 1 THE JUPITER ACE

A VICTIM OF THE DEARTH OF FORTH

BY BILL BENNETT

THE FIRST THING about the Jupiter Ace was that it doesn't use booring old BASIC. Gone were difficult concepts like line numbers, logical program flow and simple to understand commands.

Instead, the Jupiter Ace used Forth, the computer language of the space age, designed to control radio-telescopes. Forth makes use of simple, easy to grasp features like recursion, stacks and pointer symbols. Gary Kildall, the father of CP/M, describes Forth as a "verse-only language", pointing out how difficult it is to understand a Forth program, particularly somebody else's.

This is one of the more useful aspects of the language for professional programmers. After all, if programming was simple then any old person could manage to do it, and programmers wouldn't be able to point at newly-borne offspring of their work in very loud voices and even louder sheets.

Off all the advantages of Forth, the best is that it doesn't use much memory. The Jupiter Ace had only 16K of RAM so it was less likely to contain bugs, and there was a compact 32K of RAM. This

ultra-thin plastic which could be wiped with a ordinary dishcloth to remove smudge fingerprints. It came in a beautiful white case, complete with guitar-style straps. The ultra-thin plastic had been specially strengthened for lightness and flexibility.

One of the most pleasing aspects of its construction came and played when programme in a draughty room -- should a sudden gust breezing blow your Ace away, it would gently thud to the ground.

Ergonomically the Ace was a triumph. It used the tasteful 'dead-beat' style keyboard found popular on the ZX Spectrum. But amazingly no keys had been sacrificed into a smaller space. This not only meant that the computer was more compact -- taking up only 1/10th of the space of a Commodore 64 -- but also made playing games easier as the keys were harder to hit, especially liked the way the key markings went off after a note, making the computer even more secure against prying hands.

Everybody knows that one of the most important aspects of any computer is its associated software base. There was never a greater dearth of software for the Jupiter Ace, but what did exists was well worth investigating. Take, for example, the Mamecon program. This microcomputing brainchild featured an on-screen display in integrated monochrome, state-of-the-art keyboard entry and made use of the integrated speaker. Most of the rest of the software for the machine took the form of racing and utility packages. As Jupiter Ace owners aren't going to be wasting their time playing games.

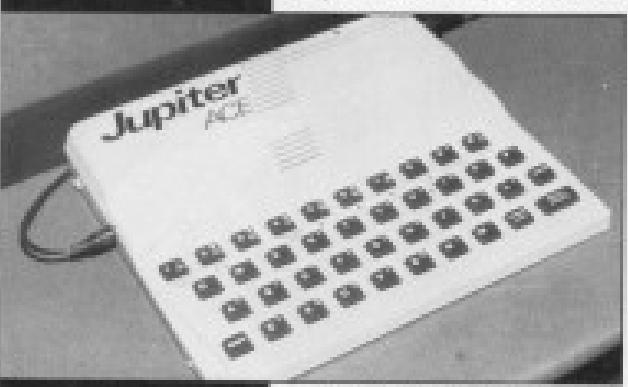
There weren't a lot of peripherals available for the Ace -- though apparently someone from the Yorkshire area did buy the disc drives. The wasn't the drawback it appeared to be, because the interface at the back of the machine doesn't work too well. Normally the Jupiter Ace runs with a white on black TV output. However if you had a soldering iron, a degree in electronics, a month of Sundays and some money to spend, building a colour monitor output was a mere exercise. A high-resolution raster of 256x192 pixels placed the Ace in the same class as the Commodore 64.

The Jupiter Ace was not the only machine in the Jupiter Canada range of computers. Later models came with a whopping 128K of RAM, and a switch which could 'turn-off' the Forth ROM. Shortly before the company went bust there were rumours of a version of BASIC available on tape.

Gone... but not forgotten.

added to the speed of the machine as there wasn't much memory to address. At 16K of memory can cost as much as £33 a kilobyte, this also means that the Jupiter Ace didn't cost too much at £80.

Just because the Jupiter Ace was cheap to buy, there was no reason to assume that the manufacturer -- Jupiter Canada -- had cut any corners. The case was made of the highest quality



GULPO!

Yes, it's here again. The column that dares to name names and point the accusing finger — mostly at ourselves. Did you spot these classic blunders for the past . . . ?

In Wast One (BIG K No.8, p.82)

Apologies to Jean Frost of Addictive Games, for it was she who translated Football Manager for the Commodore 64, and not Peter Lunn. All credit goes to Peter for the BBC version.

Race of Gold for VIC 20

BIG K No.8, p.93

Confused VIC 20 owners rest assured, you are not going mad — we are (or did a long time ago, depending on who you believe). Part of this game's listing was missing when it first appeared in BIG K No.8. It has been added before the section that appeared in BIG K No.8. Note that the listing here is uncorrected and contains all the necessary Commodore graphics characters. Just type straight in. Apologies and thanks to Mike of Gold author M. Roberts — as well as the few billion VIC 20 users out there.



Temple Trap for Oric (BIG K No.8, p.95), Bar Shooting for VIC 20

BIG K No.8, p.116

Portions of these listings were rendered illegible due to a bug in a reproduction operating system. We apologize. The bug has been shot. Desperate programmers write to BIG K for a correct and clear listing.

BIG K FUNNIES

BY ROGER WADE PAXTON



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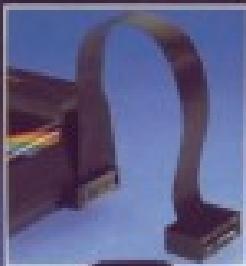
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